Course Syllabus Math 0324/1324-C201 – Coreq Business Algebra Fall 2019

Office Number: RC223F Email: <u>kkaskela@southplainscollege.edu</u> Office Phone: 806-894-9611 ext. 2742

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
1:45 – 2:25 PM	12:15 – 12:55 PM	1:45 – 2:25 PM	12:15 – 12:55 PM	10:00 AM - 1:00 PM
4:55 – 5:25 PM	4:20 – 5:00 PM	4:55 – 5:25 PM	4:20 – 5:00 PM	

Also by appointment

Textbook: <u>Mathematics with Applications in the Management, Natural, and Social Sciences</u>, 12th edition, Lial, Hungerford, Holcomb and Mullins, Pearson Education. 2019. ISBN-10: 0-13-476762-4, ISBN-13: 978-0-13-476762-8

MATH 0324/1324: Mathematics for Business and Social Sciences Support Course/Mathematics for Business and Social Sciences

MATH 0324 COURSE DESCRIPTION: The Mathematics for Business and Social Sciences Support Course is the study of the basic algebraic concepts necessary for success in MATH 1324, to include exponent rules, radical and rational expressions, and the solution of equations and inequalities. This course is not applicable toward any degree. Co-requisite: MATH 1324 (3:3:1)

MATH 1324 COURSE DESCRIPTION: In Mathematics for Business and Social Sciences, the application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.

COURSE MATERIALS:

RECOMMENDED: MyMathLab Access Code – Purchased from the bookstore or online via Pearson's website <u>www.pearsonmylabandmastering.com</u>. <u>This is not a part of your grade</u>. It is supplementary purpose only. (The course code is kaskela74252.)

RECOMMENDED: In MATH 1324 a TI 83 or 84 Graphing Calculator may be used mainly for homework assignments in some sections of Chapters 6 and 7. Otherwise, a scientific calculator may be used mainly to check your answer. (Some test problems may be done without a calculator)

Course Requirements: To maximize the potential to complete this course, a student should attend all class meetings, complete all homework assignments, and examinations including final examinations. Also, <u>bring your paper textbook</u> (not e-textbook) to class since we work on many application problems.

Upon completion of the course, students will be able to:

- 1. Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
- 2. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.
- 3. Apply basic matrix operations, including linear programming methods, to solve application problems.
- 4. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
- 5. Apply matrix skills and probability analyses to model applications to solve real-world problems.

GENERAL EDUCATION OUTCOMES:

- 1. CRITICAL THINKING Students will develop habits of mind, allowing them to appreciate the processes by which scholars in various disciplines organize and evaluate data and use the methodologies of each discipline to understand the human experience.
- 2. COMMUNICATION SKILLS Students will communicate ideas, express feelings and support conclusions effectively in written, oral and visual formats.
- 3. EMPIRICAL & QUANTITATIVE SKILLS Students will develop quantitative and empirical skills to understand, analyze and explain natural, physical and social realms.

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:

(MATH 0324)

Points From	Total	Percent
Section quizzes	100	12.5%
Homework assignments	200	25%
3 Tests *	300	37.5%
Final (Test 3)**	200	25%
	800	100%

Point Range	Course Grade
720 +	А
640 - 719	В
560 - 639	С
<u> 480 – 559</u>	D
<u>0 - 479</u>	F

*Each of Test 1, 2, and 3 are cumulative. ** Test 3 is also considered as your final exam for 0324 portion.

(MATH 324)

Points From	Total	Percent
Weekly grades	200	25%
5 Tests*	400	50%
Final	200	25%
	800	100%

Point Range	Course Grade
720 +	А
640 - 719	В
560 - 639	С
480 - 559	D
0 - 479	F

	0324	1324
Test 1	100	
Test 2	100	50
Test 3	100	50
Final (0324)	200	
	(Test 3 x 2)	
Test 4		100
Test 5		100
Test 6		100
Final (1324)		200
	500	600

*Test 2, 3 - 50 points each; Test 4, 5, and 6 - 100 points each

If you make a grade of A, B, or C, then that is the grade you will be awarded for both halves of the course. If you pass Math 0324 but not the Math 1324 portion of the course, you will be able to register for Math 1324 in future semesters. NOTE: If you pass Math 0324 but then withdraw from the course, you will be dropped from both portions of the course.

HOMEWORK: Homework will be assigned for each section covered in class.

Homework and other assessments are mandatory. Knowledge of material will be assessed through graded assessments. If a class is missed, it is the student's responsibility to obtain a copy of the notes, to pick up any worksheets or handouts if any, and to do the assigned homework. (Absence is not an excuse for failure to do homework.) Completing all assignments is understood and expected, not optional. <u>No late homework will be accepted</u>.

(MATH 0324)

- 20 points for each section; 11 sections (Chapters 1 and 2); 220 possible points
- All of the assignments will be collected on Monday for the previous week.
- <u>A section quiz</u> will be given in class after each section covered for about 20 minutes. This is an <u>open note and</u> <u>open paper textbook</u> quiz. You work on your own.

(MATH 1324)

Weekly Grades: The assignments will be collected on Monday for the previous week <u>or</u> you will be given a quiz on the assignments. You may use your homework assignments for quizzes.

- 20 points each week; 15 points from the quiz and 5 points from the assignments
- You turn in your homework assignments with your quiz.
- You will work on your quiz about 20 minutes either at the beginning of class or at the end of class.
- Total of 240 points <u>including 40 extra points</u> as your semester weekly grade (We will start 1324 topics on Week 4 until the end of semester, 12 weeks in total.)
- You need to be in class to take a quiz.

TESTS: (both 0324/1324) 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 on a same point-scale. For those students with the good attendance and good class participation, the lowest in-class test grade will be replaced with your final test grade(*) on a same point-scale (if it is higher than the in-class test).

(*)0324 - Test 3 grade will replace either Test 1 or Test 2 grade on the same point scale since Test 3 is also considered as Final exam for 0324 portion.

(*)1324 – Final exam grade will replace 1324 portion of grades of Test 2, 3, 4, 5, or 6 on the same point scale.

<u>NOTE</u>: Since homework is a part of your grade, you should be prepared to spend *at least* two hours outside of class for each hour you spend in class working on math. Doing homework at the tutoring center or with a group of peers is encouraged. Simply copying answers is still cheating, though, so be prepared to justify each answer.

ATTENDANCE POLICY: After six absences, the student with a failing average is in danger of being dropped from class with a grade an X. The instructor reserves the right to refuse a request for makeup work. If a student misses class, it is *the student's* responsibility to obtain a copy of the notes, pick up any worksheets or handouts, and to do the assigned homework.

CLASS PARTICIPATION POLICY: You are expected to come to class <u>on time</u> every day. You are responsible for being in class to take notes. Chronic tardiness (entrance after lecture has begun) may be penalized.

CLASSROOM ETIQUETTE:

- Class attendance is expected, not optional. Preparation for class (including homework) is to be completed before not during the lecture.
- Class is over when the students have been dismissed by the instructor. Preparation to leave class should be done after, not during, the lecture.
- NO tobacco use of any form is allowed in the classroom.
- <u>All electronic communication devices are to be silenced and put away during class</u>. (5 points reduction from your next test for a violation)
- <u>Discussion of course material among students is encouraged during class, but habitually disruptive</u> <u>students will be asked to leave.</u>

STUDENT SUPPORT: South Plains College provides free tutoring on a variety of subjects. Tutoring is paid for through your FEES when you enrolled. It is for your benefit. There is a Student Tutoring Center on each campus. On the Reese campus it is located in building 2 room RC212.

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 Center 806-716-2577, Reese Center Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

NON-DISCRIMINATION: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

SEXUAL MISCONDUCT: As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

DIVERSITY: 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.

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:

(<u>http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php</u>) 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.

HONESTY STATEMENT: South Plains College students should exhibit honesty, integrity, and high standards in their academic work. Members of the college community benefit from an open and honest educational environment. Upholding academic integrity is the responsibility of everyone. Refer to the Student Handbook Section: Policy on Cheating, Plagiarism, and Collusion.

USE OF STUDENT EMAIL: The College provides a free, official email account to all students to ensure efficient and secure communications between you and the College. Students will be required to use their college-issued email address to communicate with their instructors and all other college personnel, so it is easy to distinguish a student's email from spam. The College expects that students will utilize their college email addresses to send and receive communications with college personnel and will read email on a frequent and consistent basis.

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

WITHDRAWAL POLICY: Students starting college for the first time in Fall 2007 or after may only receive six grades of W (grade received from a course dropped after the census date) from all Texas public colleges and universities attended. Grades of W in developmental courses or courses taken while in high school will not count in the six grades of W. After six grades of W are received, students must receive grades of A, B, C, D, or F in all courses. There are other exemptions from the six-drop limit and students should consult with a Counselor/Educational Planner before they drop courses to determine these exemptions. **Students receiving financial aid must get in touch with the Financial Aid Office before withdrawing from a course.** It is the student's responsibility to drop. Excessive absences (7 or more absences) may result in an administrative withdrawal with a Grade of X. If you plan to withdraw, please consult with the instructor immediately.

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:

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

Holiday:	Monday, September 2	Labor Day
Fall Break:	Friday, October 11	No Office Hours
Thanksgiving	Holiday: November 27 - 29	No Classes

Tentative Course Schedule (MATH0324/1324-C201 Fall 2019)

Week	Monday	Tuesday	Wednesday	Thursday	Friday
4	8/26/2019	8/27/2019	8/28/2019	8/29/2019	8/30/201 9
1	Syllabus, 1.1	1.1, 1.2	1.2	1.3	Office Hours
	9/2/2019	9/3/2019	9/4/2019	9/5/2019	9/6/2019
2	Labor Day	1.3	2.1	2.1, 2.2	Office Hours
	(Holiday)				
_	9/9/2019	9/10/2019	9/11/2019	9/12/2019	9/13/2019
3	2.2	2.3	2.4	Review	Office Hours
	9/16/2019	9/17/2019	9/18/2019	9/19/2019	9/20/2019
4	Test 1	3.1	3.2	1.6	Office Hours
	9/23/2019	9/24/2019	9/25/2019	9/26/2019	9/27/2019
5	1.6, 3.3	3.3	1.7	1.7, 3.4	Office Hours
	0/20/2010	10/1/2010	10/2/2010	10/2/2010	10/4/2019
6	2 1	10/1/2019	10/2/2019 Roviow	10/5/2019	Office Hours
	5.4	5.5	Review	Test 2	
	10/7/2019	10/8/2019	10/9/2019	10/10/2019	10/11/2019
7	1.4	1.4, 3.6	3.6	1.5	(Fall Break)
	10/14/2019	10/15/2019	10/16/2019	10/17/2019	10/18/2019
8	1.5, 4.1	4.1	4.2	4.3	Office Hours
	,	40/22/2040	40/22/2040	40/04/0040	10/25/2010
9	10/21/2019	10/22/2019	10/23/2019	10/24/2019	Office Hours
	4.3	4.4	Review	Test 3	
	10/28/2019	10/29/2019	10/30/2019	10/31/2019	11/1/2019
10	5.1	5.2	5.3	5.4	Office Hours
	11/4/2019	11/5/2019	11/6/2019	11/7/2019	11/8/2019
11	6.1, 6.2	6.2	Review	Test 4	Office Hours
12	11/11/2019	11/12/2019	11/13/2019	11/14/2019	11/15/2019 Office Hours
12	6.3	6.4	6.5	6.6	Office floars
	11/18/2019	11/19/2019	11/20/2019	11/21/2019	11/22/2019
13	Review	Test 5	7.4	7.5	Office Hours
	11/25/2019	11/27/2019	11/27/2019	11/28/2019	11/29/2019
14	7.7	7.7	Thanksgiving	Thanksgiving	No Office Hours
			(Holiday)	(Holiday)	
	12/2/2019	12/3/2019	12/4/2019	12/5/2019	12/6/2019
15	Test 6	8.4, 8.5	9.1, 8.5	Review for Final	Office Hours
				Exam	
	12/9/2019	12/10/2019	11-Dec	12-Dec	13-Dec
16	Review for Final	Final Exam			
	Exam	(1324 Comprehensive)			

	Section Titles					
1.1	The Real Numbers					
1.2	Polynomials					
1.3	Factoring					
2.1	Graphs					
2.2	Equations of Lines					
2.3	Linear Models					
2.4	Linear Inequalities					
3.1	Functions					
3.2	Graphs of Functions					
1.6	Frist-Degree Equations (Linear Equations)					
3.3	Applications of Linear Functions					
1.7	Quadratic Equations					
3.4	Quadratic Functions and Applications					
1.4	Polynomial Functions					
3.6	Rational Functions					
1.5	Exponential and Radicals					
4.1	Exponential Functions					
4.2	Applications of Exponential Functions					
4.3	Logarithmic Functions					
4.4	Logarithmic and Exponential Equations					
5.1	Simple Interest and Discount					
5.2	Compound Interest					
5.3	Annuities, Future Value, and Sinking Funds					
5.4	Annuities, Present Value, and Amortization					
6.1	Systems of Two Linear Equations in Two Variables					
6.2	Larger Systems of Linear Equations					
6.3	Applications of Systems of Linear Equations					
6.4	Basic Matrix Operations					
6.5	Matrix Products and Inverses					
6.6	Applications of Matrices					
7.4	The Simplex Method: Maximization					
7.5	Maximization Applications					
7.7	The Simplex Method: Nonstandard Problems					
8.3	Introduction to Probability					
8.4	Basic Concepts of Probability					
9.1	Probability Distributions and Expected Value					
9.5	Markov Chains					