Math 0324/1324.C201 Math for Business and Social Sciences (CoReq)
MW 2:30 – 4:15pm
Spring 2021

Instructor: Mrs. Morgan Groves **Office Hours:** MW 1:00pm – 2:00pm *(Virtual)*
Email: mgroves@southplainscollege.edu   TR 2:15pm – 4:15pm
Office: 223F – Reese Building 2   F 10:30am – 12:30pm
Office Phone: 716-2735   (or by appointment)

Course Structure: This is a hybrid/flex course. This section will be held in a **flipped format**. That is, students are required to watch the instructor-made lecture videos found on Blackboard *prior* to class each day. In class, students may ask questions and get clarifications on any topics covered in the lecture videos. Assessments, such as labs, quizzes, and exams, will all be done in class. In the event that our class enrollment is over 18 students, I will decide who can be virtual each class day and send an e-mail the day before class to let those students know to log in on Blackboard Collaborate for class the next day. This is NOT a decision you are allowed to make. All students are expected to be physically in class unless given explicit permission to be virtual.

Textbook: This section does NOT require you to purchase a physical textbook. All resources are online through MyMathLab (the online homework system - MML) or in your class notes found on Blackboard. You can purchase a physical copy of the book if you desire, but an electronic copy is available online after you gain access to MML.

Mathematics with Applications in the Management, Natural, and Social Sciences, Lial, Hungerford, Holcomb, and Mullins, 2019, 12th Edition, Prentice Hall/Pearson Education

Course Requirements/Materials: 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. All students are expected to have reliable internet access, a reliable laptop or tablet, a printer, and either a scanner or a smart phone for submitting PDF documents. Students will also need to purchase the access to MyMathLab after the 14-day free trial period ends.

Grading Policy:		Grading Scale (0324):		Grading Scale (1324):	
Participation	7%	90-105%	A	90-105%	A
Homework (MML)	8%	80-89%	B	80-89%	B
Labs/Quizzes	15%	70-79%	C	70-79%	C
Exams (8 total)	50%	**65-69%**	D	60-69%	D
Comprehensive Final Exam	20%	Below 60%	F	Below 60%	F
Bonus Tests	5%				

The MATH 0324 final grade is at the discretion of the instructor. If you want to know your 0324 grade, you may schedule an appointment with the instructor to discuss it in her office.

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

Class Notes: All class notes can be found on Blackboard. These are just an outline and are to completed by the students while watching the lecture videos. I highly recommend printing the documents before watching the lecture videos. *Students are also expected to bring these completed notes to class each day.* I recommend keeping a 2-inch binder for this course.

Lecture Videos: All lecture videos can be found on Blackboard. Students are expected to have watched the lecture video(s) assigned for each day on the tentative calendar, filled in the class notes, which are also found on Blackboard, and have organized questions to ask in class each day over the lesson(s) assigned. All of this must be done *PRIOR* to attending class.

Homework: All homework assignments will be on MyMathLab, an online homework system, that is access through Blackboard. Homework is to be completed by the due dates posted on each assignment. No late homework will be accepted. The use of any mathematical solving apps/programs (i.e. PhotoMath, etc.) is strictly prohibited and can result in academic dishonest proceedings. All work in this class must be your own!! Three low homework grades will be dropped at the end of the semester.

Labs/Quizzes: There will be some kind of assessment (lab or quiz) each class, time permitting. For labs, students can use their class notes on the assignments. For quizzes, students can use one 3x5 note card, hand-written by the student taking the quiz. Labs and quizzes are expected to be completed before the end of the class each day.

Tests: There will be a total of 8 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. 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. You will get all of your midterm 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. Exams can be comprehensive.

> Exams will be given in two sittings if the class size is too large to have all students present at the same time. Volunteers will be requested for the alternate testing time. In the event not enough volunteers are presented, the instructor will assign students to specific test sittings and students are expected to attend as assigned. *This policy can change as we learn what works best for this class.*

Final Exam: The final exam is comprehensive. Any student who does not take the final exam will fail the class with an F regardless of the student's average. No make-up final exam will be offered.

Bonus Tests: There are weekly bonus tests on MyMathLab. 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.

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

Make-up: Make-up work is given at the discretion of the instructor. NO make-up labs, quizzes, or tests are given without prior notification AND proper documentation. If you are absent from class, have given prior notification and proper documentation of your absence, you MUST make arrangements to take the lab, quiz, or exam BEFORE the next class period. Students who do not take labs, quizzes, or exams in-class, early or late, forfeit the right to attempt any extra credit on that quiz or exam.

Attendance Policy: Attendance and effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the semester, *for any reason*. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion. Furthermore, unless given specific permission, students are expected to be IN THE CLASS ROOM for class each class day. If any student abuses the virtual component of this course, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion. That is, if a student doesn't attend class in person for an extended period of time as determined by the instructor, that student is subject to being dropped from the course by the instructor.

Participation Grade: Every day, there will be a participation grade. This grade is 50% attendance to class and the remaining 50% is awarded for watching the lecture video(s) prior to class. Students are required to submit their completed written notes on Blackboard after completing the lecture videos but PRIOR to class each class day to get this credit. Students are also expected to bring all class notes with them to class every day. The instructor will NOT help any student on a lab/worksheet if the student does not come to class prepared (with notes!). In the event you are absent during class, you will get 0 pts for the Attendance/Promptness portion of this grade for that day.

Class Participation

	Unacceptable 0 points	Acceptable 0.25 points	Exemplary 0.50 points	Score
Attendance/Promptness	The student is absent	The student is more than 10 minutes late to class	The student is on time for class	
Preparedness	The student did not complete any lecture examples from the assigned videos	The student completed only a portion of the lecture examples completed on the assigned videos	The student completed **all** lecture examples in the lecture material	
			Total Score **Max = 1 point (100%)** **Min = 0 point (0%)**	

Academic Integrity: Any student involved in cheating will receive a zero on the assignment(s) and will be informed of why he/she received a zero. In the event of a second offense, guilty students will be dropped from the course with an F and an academic dishonesty report will be filed against the student, which goes on the student's permanent school record.

Calculators: There will be times throughout the year when students will need a graphing calculator to complete an assignment. This course is taught under the assumption that each student owns a graphing calculator. I recommend a TI 84 series calculator. TI-Nspires are NOT recommended unless you are an expert at using them, as the instructor will be of little help. ***There are no calculators allowed at all until unit 3.***

Class Rules:
- Be on time and ready to learn.
- Use only pencil for all assignments.
- Students are not permitted to use electronic devices, other than a calculator, in class. **Put the cell phones away!!**
- During testing, all cell phones should be placed on SILENT or turned off, and all smart watches need to be removed and placed on the floor face-down to the left of your seat. Any student who leaves the classroom for any reason (bathroom, phone call, etc.) during an exam will not be allowed to continue the exam upon their return. Once you leave the classroom during an exam, you are done.
- Adhere to the requirements of the Student Code of Conduct.
- ***If you are joining the class through virtual means, please keep your microphone on mute until you have a question.***

Virtual Students: In the event you are joining class virtually, you are expected to stay active and attentive during the entire class. In the event of a lab, quiz, or test, you are expected to have your camera on and positioned in such a way as to allow the camera to catch both your face and your workspace. You are also expected to keep your camera on until you have explicit permission from your instructor to turn it off. Your cell phone should be on silent, face down but in view of the camera during the entire assessment. Students are expected to follow the same testing/quizzes/lab rules as any student in class. If you leave the view of the camera during an assessment without explicit permission from the instructor, you will be given a 0 on the assessment. If you break any of the rules listed above, you will receive a 0 on the assessment. Also, students are expected to keep their chat windows open during assessments as a way for the instructor to communicate (quietly) with each student. If the student does not keep their chat window visible to themselves during assessments and misses a message from the instructor, 15% credit will be deducted from that assignment's score.

Students who are virtual for an assessment have been given explicit permission by the instructor to take the assessment in this format. If you are not given this permission, you are expected to be in class for each and every assessment (labs, quizzes, tests). Instructor permission is not given lightly nor liberally and the decision to allow a student to work virtually is entirely at the instructor's discretion.

To submit work virtually, students must upload a single PDF document of their work using an app such as GeniusScan, or similar. It is the student's responsibility to ensure the document is legible and in the correct format. Any assignment not submitted in the correct format will be given a 0 on the assignment. Assignments will usually be uploaded to Blackboard, but can be e-mailed with instructor permission.

Face Coverings: It is the policy of South Plains College for the Spring 2021 semester that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in SPC buildings including in classrooms, labs, hallways, and restrooms. Failure to comply with this policy may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Dean of Students on the Levelland campus or the Dean/Director of external centers for Student Code of Conduct Violation. Students who believe they have been exposed or may be COVID-19 positive, must contact Health Services, DeEtte Edens, BSN, RN at (806) 716-2376 or dedens@southplainscollege.edu.

South Plains College
Common Course Syllabus: MATH 0324/1324
Spring 2021

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0324/1324

Course Title: Mathematics for Business and Social Sciences with Support Course

Available Formats: conventional/flex

Campuses: Levelland and Reese

Course Description: Math0324 is to be taken concurrently with MATH 1324. Background topics which are necessary for a student to successfully complete MATH 1324 will be covered, with an emphasis on fractions, factoring polynomials, functions, exponents, and operating with radical expressions. Math 1324: 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.

Prerequisite: Minimum score of 340 on the TSIA, or a successful completion with a grade of 'C' or better in MATH 0315.

Credit: 3/3 **Lecture:** 3/3 **Lab:** 1

Textbook: *Mathematics with Applications in the Management, Natural, and Social Sciences*, Lial, Hungerford, Holcomb, and Mullins, 2019, 12th Edition, Prentice Hall/Pearson Education

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:
- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student 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.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance Policy: Attendance and effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the semester, *for any reason*. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion.

Plagiarism violations include, but are not limited to, the following:
1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:
1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;
8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

COVID Syllabus Statement: Should be provided by the Vice-President of Student Services over email.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning**.** Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

Diversity Statement: 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.

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.

Nondiscrimination Policy: 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.

Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

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 and Frequently Asked Questions, please refer to the Campus Carry page at: http://www.southplainscollege.edu/campuscarry.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.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester.   The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases.   Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

Week	Day/Type	Date	Topic	Bonus Test
1				1
	Wednesday	Jan 20	Syllabus, 1.1: Integer Rules, Fraction Multiplication & Division 1.2: Fraction Addition & Subtraction, Order of Operations	
2	Monday	Jan 25	1.3: Exponent Rules & Radicals 1.4: Polynomials: Add, Subtract, Multiply Radicals: Add, Subtract Factoring: GCF, Trinomials	2
	Wednesday	Jan 27	1.5: Factoring with Leading Coefficient not 1 Special Products 1.6: Factoring Summary	
3	Monday	Feb 1	**Exam 1**	3
	Wednesday	Feb 3	2.1: Rational Expressions & Equations 2.2: Solving Linear and Absolute Value Equations	
4	Monday	Feb 8	2.3: Solving by Factoring, Quadratic Formula 2.4: Solving by Square Root Property, Complete the Square	4
	Wednesday	Feb 10	2.5: Solve Rational Equations	
5	Monday	Feb 15	**Exam 2**	5
	Wednesday	Feb 17	3.1: Graphs and Equations of Lines 3.2: Functions	
6	Monday	Feb 22	3.3: Linear Business Applications 3.4: Linear Inequalities	6
	Wednesday	Feb 24	**Exam 3**	
7	Monday	Mar 1	4.1: Quadratic Functions and Applications 4.2: Polynomial Functions	7
	Wednesday	Mar 3	4.3: Rational Functions	
8	Monday	Mar 8	**Exam 4**	8
	Wednesday	Mar 10	5.1 Exponential Functions 5.2: Exponential Applications	
Mar 15 - 19			*Spring Break*	
9	Monday	Mar 22	5.3: Logarithmic Functions 5.4: Exponential & Logarithmic Equations & Applications	9
	Wednesday	Mar 24	**Exam 5**	
10	Monday	Mar 29	6.1: Simple & Compound Interest	10
	Wednesday	Mar 31	6.2: Future Value of an Annuity 6.3: Present Value of an Annuity	
11	Monday	Apr 5	**Exam 6**	11
	Wednesday	Apr 7	7.1: Systems of Two Linear Equations 7.2: Gauss-Jordan Elimination (GJE)	
12	Monday	Apr 12	7.3: Direct Translation & Word Problems 7.4: Applications of Systems (GJE)	12
	Wednesday	Apr 14	7.5: Products and Inverses of Matrices 7.6: Applications of Matrices – Leontief Input-Output Models	
13	Monday	Apr 19	**Exam 7**	13
	Wednesday	Apr 21	8.1: Graphing Linear Inequalities, Linear Programming: Graphical Method 8.2: Linear Programming: Applications	

14	Monday	Apr 26	8.3: Simplex Method: Maximization 8.4: Maximization Applications	14
	Wednesday	Apr 28	8.5: Duality Method: Minimization with Applications 8.6: Simplex Method: Nonstandard Problems	
15	Monday	May 3	**Exam 8**	15
	Wednesday	May 5	9.1: Introduction to Probability, Expected Value 9.2: Markov Chains	
16	Monday	**May 10**	Final Exam **1:00pm – 3:00pm**	**none**