

South Plains College
Math 1324.251TR Syllabus
Mathematics for Business, Economics, Life and Social Sciences
Fall 2021 – TTAP
Tuesdays/Thursdays 3pm – 4:20pm MCOM 266

Instructor: Mrs. Morgan Groves

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Office: 223F – Reese Building 2

Office Phone: 716-2735

Office Hours: MW 1pm – 3pm

TR 8am – 8:30am (Virtual)

F 9am – 12pm

(or by appointment)

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. This section of 1324 requires each student to utilize MyMathLab for the online homework as well as coming to class each day with the notes provided by the instruction online at southplainscollege.blackboard.com.

Textbook: This section does NOT require you to purchase a physical textbook. However, you can purchase a physical copy of the book if you desire. 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.

Class Notes: All class notes can be found on Blackboard. These are just an outline and are to be completed by the students during the in-class lectures. I highly recommend printing the documents before attending class each day. Students are also expected to bring these completed notes to class each day. I recommend keeping a 2- to 3-inch binder for this course.

Grading:	Tests (4 total)	60%	Grading Scale:	A 90-105
	Homework	10%		B 80-89
	Labs/Quizzes	10%		C 70-79
	Final Exam	20%		D 60-69
	Bonus Tests	5%		F 59 or below

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

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.

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. 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.

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. The final exam will be held on **Tuesday, December 7th from 4:30pm to 7:00pm.**

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.

Office Hours: Office hours are listed on the first page of this syllabus. Unless otherwise indicated, office hours are held in person at my office on the Reese campus. If the office hours are indicated to be virtual, student can log into Blackboard and click the Virtual Office Hours link on the left side of the course page to join me on Blackboard Collaborate. Office hours are intended for the benefit of students, to give them a chance to get some extra help whenever needed. I strongly encourage each student to utilize as many office hours as possible.

SPC 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.

TTAP Attendance Policy: Students are only allowed 4 absences in this class. If a student exceeds the allowed absences, then they may be dismissed from the TTAP program. An absence is defined as:

- Failing to attend a scheduled class.
- Missing more than 10 minutes of a scheduled class.
- Leaving class early without notifying the instructor and obtaining approval from the instructor in advance.

There are no excused absences, even with a doctor's note.

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 and Casio calculators are NOT recommended unless you are an expert at using them, as the instructor will be of little help.

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.

**South Plains College
Common Course Syllabus: MATH 1324
Revised August 2021**

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1324

Course Title: Mathematics for Business and Social Sciences

Available Formats: conventional, hybrid and internet

Campuses: Levelland, Reese, and Dual Credit

Course Description: 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 350 on the TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0320, or successful completion of NCBM-0114.

Credit: 3 **Lecture:** 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/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor may remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student cannot receive an X, the instructor will assign an F.

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: It is the policy of South Plains College 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. There will be no requirement for face coverings at any location on any South Plains College campus or classroom. Faculty, staff, or students may continue to wear a mask voluntarily, but there will be no requirements for face coverings in any circumstance.

If you are experiencing any of the following symptoms please do not attend class and either seek medical attention or get tested for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at dedens@southplainscollege.edu or 806-716-2376.

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 rcanon@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.

Tentative Calendar for Math 1324 – TTAP – Fall 2021				
Day	Date	Topic	Notes	Bonus Test
Tuesday	Aug 24	Introduction/Graphs and Equations of Lines	Syllabus, 1.1	1
Thursday	Aug 26	Linear Inequalities	1.2	
Tuesday	Aug 31	Functions and their Graphs, Applications of Linear Functions	1.3	2
Thursday	Sept 2	Quadratic Functions and Applications	1.4	
Tuesday	Sept 7	Polynomial Functions and Applications	1.5	3
Thursday	Sept 9	Rational Functions and Applications	1.6	
Tuesday	Sept 14	Exam 1	Unit 1	4
Thursday	Sept 16	Exponential Functions and Applications	2.1	
Tuesday	Sept 21	Logarithmic Functions and Properties	2.2	5
Thursday	Sept 23	Logarithmic and Exponential Equations & Applications	2.3	
Tuesday	Sept 28	Simple and Compound Interest	2.4	6
Thursday	Sept 30	Annuities	2.5	
Tuesday	Oct 5	Review		7
Thursday	Oct 7	Exam 2	Unit 2	
Tuesday	Oct 12	Systems of Two Linear Equations	3.1	8
Thursday	Oct 14	Gauss-Jordan Elimination, Applications of Systems	3.2	
Tuesday	Oct 19	Matrix Operations, Inverses, and Input-Output Analysis	3.3	9
Thursday	Oct 21	Matrix Operations, Inverses, and Input-Output Analysis	3.3	
Tuesday	Oct 26	Graphing Linear Inequalities, Linear Programming: Graphical Method	3.4	10
Thursday	Oct 28	Review		
Tuesday	Nov 2	Exam 3	Unit 3	11
Thursday	Nov 4	Linear Programming: Simplex Method	4.1	
Tuesday	Nov 9	Linear Programming: Two-Phase Nonstandard	4.2	12
Thursday	Nov 11	Introduction to Probability; Expected Value	4.3	
Tuesday	Nov 16	Markov Chains	4.4	13
Thursday	Nov 18	Review		
Tuesday	Nov 23	Exam 4 <i>CANNOT TAKE EARLY!!</i>	Unit 4	14
Thursday	Nov 25	<i>Thanksgiving Break</i>		
Tuesday	Nov 30	Review		None
Tuesday	Dec 7	Final Exam	Comprehensive	4:30pm – 7:00pm

Last day to drop a class (SPC): December 2, 2021