

**Math 0324/1324.C201 Math for Business and Social Sciences (CoReq)**  
**TR 9:00am – 10:45am**  
**Spring 2022**  
Room – RC 221

**Instructor:** Mrs. Morgan Groves  
**Email:** mgroves@southplainscollege.edu  
**Office:** 223F – Reese Building 2  
**Office Phone:** 716-2735

**Office Hours:** MW 1pm – 2pm  
TR 1pm – 2:30pm  
F 8am – 11am  
(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. 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, 12<sup>th</sup> 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 (1324):**

Participation	7%
Homework (MML)	7%
Labs/Quizzes	16%
Exams (5 total)	50%
Comprehensive Final Exam	20%
<i>Bonus Tests</i>	5%

**Grading Scale (1324):**

90-105%	A
80-89%	B
70-79%	C
60-69%	D
Below 60%	F

**The MATH 0324 final grade is at the discretion of the instructor and is only a Pass/Fail grade.**

**\*\*\*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 be 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 5 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 may be comprehensive.

**Final Exam:** There are TWO final exams for these courses, one for Math 0324 (P/F) and one for Math 1324 (college-level). The final exams are each comprehensive. Any student who does not take the final exams will fail the classes with F's regardless of the student's average. No make-up final exams will be offered. The final exams will be held on Tuesday, May 10<sup>th</sup> from 8am to 10am and Thursday, May 12<sup>th</sup> from 8am to 10am. Wait for more details to be shared on Blackboard near the end of the term.

**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.

**SPC Attendance 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.

Furthermore, unless given specific permission, students are expected to be IN THE CLASS ROOM and on time 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 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. There are no excused absences, even with a doctor's note.

Any student who arrives more than 10 minutes late or leaves early without permission will be counted tardy and 25% of their participation grade that day will be deducted. Any student who falls asleep during class or who leaves class for an extended period of time, as determined by the instructor, will have 25% or more of their participation grade deducted for that day.

**Participation Grade:** Every day, there will be a participation grade. This grade is 50% attendance to/participation in class and the remaining 50% is awarded for watching the lecture video(s) prior to class and filling in the lecture notes. 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. The notes should be in a single PDF file when uploaded. Students are also expected to bring all class notes with them to class every day. If the student does not come to class prepared (with notes), then that student forfeits the right to ask for assistance from the instructor and other students on any assignments or class lectures that day. 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

	<b>Unacceptable 0 points</b>	<b>Acceptable 0.25 points</b>	<b>Exemplary 0.50 points</b>	<b>Score</b>
<b>Attendance/Promptness</b>	The student is absent	The student is more than 10 minutes late to class	The student is on time for class	
<b>Preparedness</b>	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 <b>all</b> lecture examples in the lecture material	
<b>Total Score Max = 1 point (100%) Min = 0 point (0%)</b>				

**Submitting Documents Online:** Students will be required to upload their completed notes to Blackboard. This is expected to be done as a single PDF file that is clear and legible. Students are allowed to use whatever hardware/software they desire to create the PDF files, but here are a few suggestions:

App: **GeniusScan** – need a Google email to do this for free

App: **CamScanner** – limit on number of pages that can be compiled on the free version

Apple Phone – has a program on it already that will compile pictures into PDF files

**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.

**South Plains College**  
**Common Course Syllabus: MATH 0324/1324**  
**Spring 2022**

**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, 12<sup>th</sup> 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 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.

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](mailto: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 cqilster@southplainscollege.edu](mailto:cqilster@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 0324/1324 Spring 2022

Week	Day	Date	Topic	Bonus Test
1	Tuesday	Jan 18	1.1: Integer Rules, Fraction Multiplication & Division	1
	Thursday	Jan 20	1.2: Fraction Addition & Subtraction, Order of Operations	
2	Tuesday	Jan 25	1.3: Exponent Rules & Radicals	2
	Thursday	Jan 27	1.4: Polynomials: Add, Subtract, Multiply Radicals: Add, Subtract Factoring: GCF, Trinomials	
3	Tuesday	Feb 1	1.5: Factoring with Leading Coefficient not 1 Special Products 1.6: Factoring Summary	3
	Thursday	Feb 3	<b>Exam 1 (Unit 1)</b>	
4	Tuesday	Feb 8	2.1: Rational Expressions & Equations	4
	Thursday	Feb 10	2.2: Solving Linear and Absolute Value Equations	
5	Tuesday	Feb 15	2.3: Solving by Factoring, Quadratic Formula 2.4: Solving by Square Root Property, Complete the Square	5
	Thursday	Feb 17	2.5: Solve Rational Equations	
6	Tuesday	Feb 22	<b>Exam 2 (Unit 2)</b>	6
	Thursday	Feb 24	3.1: Graphs and Equations of Lines 3.2: Linear Inequalities	
7	Tuesday	Mar 1	3.3: Functions 3.4: Linear Business Applications	7
	Thursday	Mar 3	4.1: Quadratic Functions and Applications 4.2: Polynomial Functions	
8	Tuesday	Mar 8	4.3: Rational Functions	8
	Thursday	Mar 10	<b>Exam 3 (Units 3 &amp; 4)</b>	
		Mar 14 – 18	Spring Break	
9	Tuesday	Mar 22	5.1 Exponential Functions 5.2: Exponential Applications	9
	Thursday	Mar 24	5.3: Logarithmic Functions	
10	Tuesday	Mar 29	5.4: Exponential & Logarithmic Equations & Applications	10
	Thursday	Mar 31	6.1: Simple & Compound Interest	
11	Tuesday	Apr 5	6.2: Future Value of an Annuity 6.3: Present Value of an Annuity	11
	Thursday	Apr 7	<b>Exam 4 (Units 5 &amp; 6)</b>	
12	Tuesday	Apr 12	7.1: Systems of Two Linear Equations 7.2: Gauss-Jordan Elimination (GJE)	12
	Thursday	Apr 14	7.3: Direct Translation & Word Problems 7.4: Applications of Systems (GJE)	
13	Tuesday	Apr 19	7.5: Products and Inverses of Matrices 7.6: Applications of Matrices – Leontief Input-Output Models	13
	Thursday	Apr 21	8.1: Graphing Linear Inequalities, Linear Programming: Graphical Method 8.2: Linear Programming: Applications	
14	Tuesday	Apr 26	8.3: Simplex Method: Maximization 8.4: Maximization Applications	14
	Thursday	Apr 28	8.5: Two-Phase: Nonstandard Linear Programming	

15	Tuesday	May 3	<b>Exam 5 (Units 7 &amp; 8)</b>	15
	Thursday	May 5	9.1: Introduction to Probability, Expected Value 9.2: Markov Chains	
16	<b>Tuesday</b>	<b>May 10</b>	<b>Final Exam (0324: Units 1 – 3)</b>	<b>8am – 10am</b>
	<b>Thursday</b>	<b>May 12</b>	<b>Final Exam (1324: Units 4 – 9)</b>	<b>8am – 10am</b>

Last day to drop – April 21, 2022

*All homework is due on MyMathLab by 11:59pm of the due date indicated on MyMathLab.*