

Math 0324/1324.C601 Math for Business and Social Sciences (Corequisite)
Mondays and Wednesdays 9am – 10:45am
Fall 2023 Room – B031

Instructor: Mrs. Morgan Groves
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Office: B017
Office Phone: 806-716-2735

Office Hours: TR 11am – 1:30pm
F 8am – 11am
(or by appointment)

Course Structure

- Flipped course
 - Watch lecture video (Blackboard) and fill in notes **before** class each day.
 - Students provide questions in class to discuss and solidify topics over the lesson(s).
 - Homework is to be attempted before class.
 - Assessments, such as labs 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

- No book for this section.

Course Requirements/Materials

- Attend all classes with notes and homework done in advance.
- All graded assessments assigned in class are expected to be completed in the allotted class time, unless otherwise instructed by the professor.
- Reliable internet access
- Printer (for notes), but notes can be done electronically (tablet/iPad) as long as they are written by hand
- Smart phone and/or scanner to turn a written document into a PDF file
- Solid work ethic and character.

Grading Policy (1324):

Participation	10%
Homework	10%
Exams	60%
Final Exam	20%

Grading Scale (1324):

90-100%	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

- Found on Blackboard under Course Content.
- Should be completed by each student (hand-written) using lecture videos provided on Blackboard.
- Bring all notes to class each day (2-3 inch binder recommended)
- Upload completed notes to Gradescope before class starts each day.
 - This is part of the daily participation grade.

Lecture Videos

- Found on Blackboard under Course Content.
- Watch and fill in the notes, pausing often to allow for cognitive processing time.
- Organize your questions to bring to class the next day.
- All questions posed in the lecture videos must be answered by the student prior to coming to class each day.
 - Completion of the lecture videos is part of your participation grade each day.

Homework

- Written assignments
- Submitted on Gradescope by due date indicated on course calendar at the end of this syllabus.
- Only certain problems will be explicitly graded, but a portion (20%) of each homework grade is completion of the “required problems” on the assignment.
 - The problems that will be explicitly graded are **not** disclosed in advance.
- All work should be shown on your own paper.
- Problems must be in proper order on paper.
- Must use pencil.
- Must be done by hand (no typing).
- Show all work!!
- Must be your own work!
- Answers found on Blackboard.
- Using PhotoMath (or similar) is strictly prohibited and will result in academic dishonestly reports being submitted to your permanent record.
- Using ChatGPT on any assignment in this class is strictly prohibited.

Tests

- 5 midterm exams and 2 required final exams
- No notes/homework/textbooks will be allowed on ANY exam
- Complete in the allotted class time
- No exam grades will be dropped.
- 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

- The 1324 final exam is comprehensive.
- The 0324 final exam will cover only developmental material.
- 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 Math 0324 final exam will be held on **Monday, Dec. 11th** from **8am to 10am**.
- The Math 1324 final exam will be held on **Wednesday, Dec. 13th** from **8am to 10am**.
- More details will be shared on Blackboard near the end of the term.

Late work

- If you submit your notes late, you will receive 25% off your daily grade.
- If you submit your homework late, you will receive 20% off your homework grade.
- Exams cannot be taken early or late. You must take exams in the classroom at the assigned testing time.

Make-up

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

Attendance Policy

- Students are expected to attend **at least** eighty percent (80%) of the total class meetings (24 classes) **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.
- Unless given specific permission, students are expected to be in the class room and on time for class each class day.
- There are no excused absences, even with a doctor's note.
- Tardy
 - More than 10 minutes late
 - 25% of participation grade that day will be deducted
- Any student who arrives more than 30 minutes late or leaves more than 30 minutes early without instructor permission will be counted absent that day and 50% 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.
- Every 3 tardies count as 1 absence.
- Any student who is late to class may not be allowed to turn in homework that day.
- Transportation issues? Call an Uber, get a bus pass (Route 5 drops off just one block from the Downtown Center campus – Broadway and Ave Q – and starts at 7:50am and runs until 8:45pm), call a taxi (West Texas Cab Company (806) 559-9900), or ask a friend for a ride.

Participation Grade

- Daily 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 and uploading the lecture notes to Gradescope before class each day.
 - Completed lecture notes should be uploaded to Gradescope.
 - Failure to upload the completed notes will result in up to 25% of the participation grade that day being deducted.
- To receive full credit for the Attendance/Participation in Class portion of this daily grade, students must:
 - Be on time to class
 - Not leave class early
 - Not leave class for an extended period of time, as deemed by the instructor.
 - Stay awake during class
 - Not be on a cell phone or other mobile device during class
 - Participate in classroom discussions
 - Come prepared for class with notes/homework/review in hand.

- In the event you are absent during class, you will get 0 pts for the Attendance/Promptness portion of this grade for that day.

Submitting Documents Online (Gradescope)

- Download the Gradescope app onto your smart phone.
 - Log-in with your SPC credentials, just like you log into Blackboard.
- Students will be required to upload written work to Gradescope (notes, not homework).
- This is expected to be done clearly and legibly.
- After uploading your work, Gradescope will provide you an opportunity to indicate which problems are on which pages of your work. Please be sure you take the time to assign the problems to certain pages.

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.
- Student may be administratively dropped from the class and will receive an X or F.

Calculators

- 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.

Class Rules:

- Be on time and ready to learn.
- Use only pencil for all assignments.
- Have the notes completed **prior** to coming to class.
- 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

- Stay active and attentive during the entire class.
- Camera on and positioned in such a way as to allow the camera to catch both your face and your workspace.
- Keep your camera on until you have explicit permission from your instructor to turn it off.
- 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.
- Keep chat windows open during assessments as a way for the instructor to communicate (quietly) with you.
 - If the student does not keep their chat window visible to themselves during assessments and misses a message from the instructor, 15% credit may be deducted from that assignment's score.
- If you break any of the rules listed above, you will receive a 0 on the assessment.

- 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.

South Plains College
Common Course Syllabus: MATH 0324/1324
Revised December 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, hybrid, and internet

Campuses: Levelland and Downtown Center

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: Math 0324 - Minimum score of 340 on the TSIA1, minimum diagnostic score of 3 on the TSIA2, a successful completion with a grade of 'C' or better in MATH 0315, or a successful completion of NCBM-0105.

Math 1324 - 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 (each): 3 Lecture: 3 Lab: 1

Textbook: *Mathematics with Applications in Business and Social Sciences*, Hawkes Learning, 2022, Hawkes Learning

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) if you pass Math 1324.

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.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. 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.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: <https://www.southplainscollege.edu/syllabusstatements/>.

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: <https://www.southplainscollege.edu/emergency/covid19-faq.php>.

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 Fall 2023				
Week	Day	Date	Topic	Homework
1	Monday	Aug 28	Syllabus and Introduction	
	Wednesday	Aug 30	1.1 – 1.2: Foundations by Hand; Integer Rules, Fraction Multiplication and Division	1.1 & 1.2 Due Sept 3 rd
2	Monday	Sept 4	Labor Day	
	Wednesday	Sept 6	1.3 – 1.5: Fraction Addition & Subtraction, Order of Operations; Exponent Rules & Radicals; Like Terms; Multiplying Polynomials	1.3, 1.4, & 1.5 Due Sept 10 th
3	Monday	Sept 11	1.6 – 1.7: Solving Linear & Absolute Value Equations; Linear Inequalities; Graphs & Equations of Lines	1.6 & 1.7 Due Sept 12 th
	Wednesday	Sept 13	1.8. – 1.9: Functions; Linear Business Applications	1.8 – 1.9 Due Sept 17 th
4	Monday	Sept 18	Exam 1	
	Wednesday	Sept 20	2.1 – 2.2: Factoring Polynomials; Solving Quadratic Equations	2.1 – 2.2 Due Sept 24 th
5	Monday	Sept 25	2.3: Quadratic Functions and Applications	2.3 Due Sept 26 th
	Wednesday	Sept 27	2.4: Polynomial Functions	2.4 Due Oct 1 st
6	Monday	Oct 2	Exam 2	
	Wednesday	Oct 4	3.1: Simplifying Rational Expressions;	3.1 Due Oct 8 th
7	Monday	Oct 9	3.2: Solving Rational Equations	3.2 Due Oct 10 th
	Wednesday	Oct 11	3.3: Rational Functions	3.3 Due Oct 15 th
8	Monday	Oct 16	Exam 3	
	Wednesday	Oct 18	4.1: Systems of Linear Equations	4.1 Due Oct 22 nd
9	Monday	Oct 23	4.2: Applications of GJE	4.2 Due Oct 24 th
	Wednesday	Oct 25	4.3: Input-Output Models	4.3 Due Oct 29 th
10	Monday	Oct 30	4.4: Linear Programming Graphical Method	4.4 Due Oct 31 st
	Wednesday	Nov 1	4.5: Linear Programming Simplex Method	4.5 Due Nov 5 th
11	Monday	Nov 6	4.6: Linear Programming Two-Phase Method	4.6 Due Nov 7 th
	Wednesday	Nov 8	Exam 4	
12	Monday	Nov 13	5.1: Exponential Functions & Applications	5.1 Due Nov 14 th
	Wednesday	Nov 15	5.2: Logarithmic Functions & Applications	5.2 Due Nov 19 th
13	Monday	Nov 20	5.3: Simple & Compound Interest	5.3 Due Nov 21 st
	Wednesday	Nov 22	Thanksgiving Break – No classes	
14	Monday	Nov 27	5.4: Annuities	5.4 Due Nov 28 th

	Wednesday	Nov 29	6.1: Probability, Expected Value, and Markov Chains	6.1 Due Dec 3 rd
15	Monday	Dec 4	Exam 5	Units 5 & 6
	Wednesday	Dec 6	Review	
16	Monday	Dec 11	Math 0324 Final Exam 8am – 10am	
	Wednesday	Dec 13	Math 1324 Final Exam 8am – 10am	

Last day to drop – Nov. 30th

The following sections are considered **developmental material**. Mastering these sections will earn students a P in Math 0324 this term.

Sections 1.1 – 1.8

Sections 2.1 – 2.2

Sections 3.1 – 3.2

Section 4.1