## Math 0324/1324.C602 Math for Business and Social Sciences (CoReq) Tuesdays and Thursdays 12:30pm – 2:15pm Fall 2024 Room – B031

Instructor: Mrs. Morgan Groves Email: mgroves@southplainscollege.edu Office: B017 Office Phone: 806-716-2735 Office Hours: Mon/Wed 1pm – 2:30pm Tues/Thurs 4pm – 5pm Fri 9am – 12pm (or by appointment)

#### **Course Structure**

- Live in-person lectures with video support online
  - $\circ$  Daily lectures will be done in class with the notes outline provided on Blackboard.
    - Students are to print the notes *before* coming to class.
  - $\circ$   $\;$  Assessments, such as 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.
  - Academic Coach!

#### Academic Coach

- Malini Parameswaran, call her Malini.
- Office Hours: Tuesdays and Thursdays 9:15am 12:30pm, Wednesdays 9am 2pm.
- Location: 1<sup>st</sup> Floor Lobby/Study Area, Room A or B

#### Textbook

• No book for this section.

#### **Course Requirements/Materials**

- Attend all classes with notes and homework printed 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 and homework), but notes can be done electronically (tablet/iPad) as long as they are written by hand
- Solid work ethic and character.

Grading Policy (1324):		Grading Scale (1324):		
Daily	10%	90-100%	А	
Quizzes	10%	80-89%	В	
Exams (5)	60%	70-79%	С	
Final Exam	20%	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) in class during the daily lectures.
- Some sections are assigned to be done "online". That is, students will use the lecture videos provided on Blackboard to complete the notes before the next class meeting.

- Upload completed notes to Gradescope for a Daily grade by the start of the next class.
- Bring all notes to class each day (2-3 inch binder recommended)
- In the event that a section of notes was not completed during class, the instructor may assign those notes to be completed using the lecture videos found on Blackboard.
  - Upload completed notes to Gradescope by the instructed due date for a daily 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.

### **Daily Grade**

- In the event that students must finish the class notes using the lecture videos on Blackboard, students will be required to submit the completed notes to Gradescope for a daily grade.
- Depending on how many daily grades there are by the end of the term, up to 3 daily grades may be dropped.

### Homework

- Written assignments
- Not graded nor submitted, but the only way to succeed in this course is to do every homework problem on every assignment.
- All work should be shown on your own paper.
- Problems should 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 (or similar) on any assignment in this class is strictly prohibited.

## Quizzes

- Could be daily or weekly
  - Can use written homework on the quizzes.
- Quizzes must be completed in the allotted time in class.
- No make-up quizzes are available.
  - If you miss class on a quiz day, then you miss the quiz and will get a 0.
  - Up to 3 quiz grades may be dropped at the end of the term.
- Students may use their completed homework on the quizzes. This homework must be handwritten and their own work.

## Tests

- 5 midterm exams and 2 final exams
- A <u>3x5 handwritten notecard</u> can be used on some of the midterm exams. Double-sided is okay.
   The exams with an \* after them on the calendar can have a single 3x5 notecard.
- 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 <u>may</u> be comprehensive.

- No make-up exams will be given.
  - In the event you miss a test, your final exam grade can replace up to one missed test grade.
- Test corrections are for your own benefit and will not be graded.

### **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 Thursday, Dec 5<sup>th</sup> in our regularly scheduled class time.
- The Math 1324 final exam will be held on Thursday, Dec 12<sup>th</sup> from 10:15am to 12:15pm.

### Late work

- <u>Definition</u>: work that was assigned but not turned in on time.
  - Ex: notes were to be completed using the lecture videos and uploaded to Gradescope, but student did not upload the notes by the due date.
- Late work is not accepted.
- If you do not turn in an assignment on time, you will receive a zero.

### Make-up

- <u>Definition:</u> work that is done by students after the class has already completed the assignment.
  - Ex: Student misses a quiz in class because they were late or absent from class.
- Make-up work is given <u>at the discretion of the instructor</u>.
- In the event the instructor gives permission for a student to take a make-up assignment, that assignment must be completed before the next class day or before the grades are posted for that assignment, whichever comes first.
- NO make-up quizzes or tests are given without prior notification AND proper documentation.
- If you are absent from class on an exam day, have given prior notification and proper documentation of your absence, you MUST make arrangements to take the exam BEFORE the next class period or the end of the week, whichever occurs first.
- If proper documentation and/or prior notification was not provided for your absence, and/or if you have not made arrangements (prior to the missed class) with the professor to take the missed assignment, then you will receive a 0 for that assignment.
  - Some number of grades might be dropped at the end of the term depending on how many grades in each category there are by the end of the term.
    - No test grades are dropped.

## Attendance Policy

- No more than 6 classes can be missed.
  - Students may be administratively dropped from the class for missing over 6 classes for *any* reason.
- Students must not miss too many assignments! Missing more than 20% of the assignments in the term can result in an administrative drop from the course.
- Unless given specific permission, students are expected to be in the class room and on time for class each class day.
- <u>There are no excused absences</u>, even with a doctor's note.
- Tardy
  - More than 10 minutes late
  - Leaving early

- Any student who arrives more than 45 minutes late or leaves more than 45 minutes early without instructor permission will be counted <u>absent</u> that day.
- Any student who falls asleep during class or who leaves class for an extended period of time, as determined by the instructor, will be counted "tardy" that day.
- Every 3 tardies count as 1 absence.
- 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.

### **Initial Assessment**

- An assessment of your pre-algebra and beginning algebra skills will be given on the first day of class.
- If you do not pass this assessment with 75% or higher, it is strongly encouraged that you drop these classes and take MATH 0305 this term.
- The skills presented on this assessment are <u>required</u> knowledge <u>before</u> starting this course.

### In the event of "life" preventing you from attending class:

- 1. Email the professor ASAP to inform her of your situation. Provide documentation, if applicable.
- 2. Plan to attend class virtually via Blackboard Collaborate (permission required).
  - This will count for your attendance that day.
- If you are absent or a virtual student on a quiz/test day, make arrangements with the professor via email BEFORE class to take the quiz/test when you return. If that is unreasonable (i.e. you expect a long absence), then a virtual quiz/test <u>might</u> be possible with enough advanced notice to the professor.
  - Virtual quizzing/testing is allowed at the discretion of the professor.
- 4. If students are not able to attend class virtually and/or are not granted permission to be a virtual student that day, then that missed class will count as an absence regardless of the reason.
- 5. Students are expected to make every effort to attend class each day.

### Submitting Documents Online (Gradescope)

- Download the Gradescope app onto your smart phone.
  - Log-in with your SPC credentials, exactly like you log into Blackboard.

### 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 has the use of a graphing calculator.
- I recommend a TI 83 or 84 series calculator.
- TI-Nspires and Casios 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 (Blackboard Collaborate)

- 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 <u>may</u> 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: <a href="https://www.southplainscollege.edu/syllabusstatements/">https://www.southplainscollege.edu/syllabusstatements/</a>.

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

**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 2024					
Week	Day	Date	Торіс	Homework	
1	Tuesday	Aug 27	Syllabus and Introduction; Initial Assessment		
	Thursday	Aug 29	1.1: Integer & Fraction Operations 1.2: Order of Operations (Online)	1.1 – 1.2	
2 -	Tuesday	Sept 3	1.3: Solving Linear Equations & Linear Inequalities	1.3	
	Thursday	Sept 5	1.4: Graphs & Equations of Lines	1.4	
3	Tuesday	Sept 10	1.5: Functions	1.5	
	Thursday	Sept 12	1.6: Linear Business Applications	1.6	
	Tuesday	Sept 17	Exam 1	Unit 1	
4	Thursday	Sept 19	2.1: Systems of Linear Equations 2.2: Gauss-Jordan Elimination (Online)	2.1 – 2.2	
5	Tuesday	Sept 24	2.3: Input-Output Models	2.3	
	Thursday	Sept 26	2.4: Linear Programming Graphical Method	2.4	
6	Tuesday	Oct 1	2.5: Linear Programming Simplex Method	2.5	
	Thursday	Oct 3	2.6: Linear Programming Two-Phase Method	2.6	
7	Tuesday	Oct 8	Exam 2*		
	Thursday	Oct 10	3.1: Exponent Rules & Radicals (Rationalizing)	3.1	
8	Tuesday	Oct 15	3.2: Factoring Polynomials	3.2	
	Thursday	Oct 17	3.3: Solving Quadratic Equations 3.4: Quadratic Functions and Applications (Online)	3.3 – 3.4	
9	Tuesday	Oct 22	3.5: Polynomial Functions	3.5	
	Thursday	Oct 24	Exam 3		
10	Tuesday	Oct 29	4.1: Simplifying Rational Expressions	4.1	
	Thursday	Oct 31	4.2: Solving Rational Equations	4.2	
11	Tuesday	Nov 5	4.3: Rational Functions	4.3	
	Thursday	Nov 7	4.4: Probability & Expected Value 4.5: Markov Chains (Online)	4.4 - 4.5	
12	Tuesday	Nov 12	Exam 4*		
	Thursday	Nov 14	5.1: Exponential Functions & Applications (Online – Before class) 5.2: Logarithmic Functions	5.1 – 5.2	
13	Tuesday	Nov 19	5.3: Exponential & Logarithmic Equations and Applications	5.3	
	Thursday	Nov 21	5.4: Simple & Compound Interest	5.4	
14	Tuesday	Nov 26	5.5: Annuities	5.5	
	Thursday	Nov 28	Thanksgiving Break		
15	Tuesday	Dec 3	Exam 5*		
	Thursday	Dec 5	Math 0324 Final Exam		
16	Tuesday	Dec 10	No class – Finals Week		
	Thursday	Dec 12	Math 1324 Final Exam 10:15am – 12:15pm		

Last day to drop – Dec 2, 2024

\*These exams can have a 3x5 hand-written notecard used on them. Be prepared to turn in the notecard with your exam.

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

Sections 1.1 - 1.5Section 2.1 Sections 3.1 - 3.3Section 4.1 - 4.2