South Plains College Math 1324.151 Syllabus Mathematics for Business, Economics, Life and Social Sciences Summer I 2024 Online Course

Instructor: Mrs. Morgan Groves **Office Hours:** By appointment only

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Course Structure

- Online course.
 - o All assignments will be done virtually.
 - In the event of an exam, students will utilize HonorLock, software that will record them during their assessment.

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.

Textbook

No book for this section.

Course Requirements/Materials

- Reliable internet access
- Working webcam and microphone other than your smart phone.
- Printer (for notes/Labs), but notes can be done electronically (tablet/ipad) instead of printing
- Smart phone and/or scanner to turn a written document into a PDF file

Grading:	Tests (4 total)	60%	<u>Grading Scale</u> :	A 90-100
	Daily/Participation	20%	-	B 80-89
	Final Exam	20%		C 70-79
				D 60-69
				F 59 or below

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

Communication

- Students are expected to check their SPC emails at least once per day.
- The instructor promises to respond to student emails within 36 hours, with the exception of weekends
- The instructor does not check/respond to emails after 5pm on Fridays and not at all on Saturdays and Sundays. Any emails sent past 5pm on a Friday will be responded to on Monday.

Class Notes

- Found on Blackboard under Course Content.
- Should be completed by each student (hand-written) using lecture videos provided on Blackboard.
 - I recommend you print the notes, but this is not required. You may fill them out digitally using a tablet or use your own blank paper to take notes during the videos.
- Upload completed notes to Gradescope by the indicated due date on the course calendar at the end of this syllabus.
 - These are daily/participation grades.

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 e-mail your professor for extra help.
- Completion of the lecture videos is part of your participation grade.

Homework

- Written assignments found on Blackboard in the Course Content folder.
- 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 to promote optimal learning.
- Problems should be in proper order on paper to promote optimal learning.
- Must use pencil. Mistakes happen.
- Show all work!! This is the best practice for your exams.
- 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.

Tests

- 4 total exams, plus a final
- Certain exams can have the use of a hand-written notecard. See Calendar at end of syllabus.
- All tests are expected to be completed in the allotted time, no exceptions.
 - o 2-hour testing time
 - Up to 3-day window to take exams
- Students must complete the exam in one sitting (no "come-and-go" allowed).
- No test grades will be dropped.
- All virtual exams will utilize HonorLock.
 - o There are rules that each student must follow while using HonorLock.
 - ANY violation of one or more of these rules will result in an immediate 0 on the assessment.
 - You can find the rules in this syllabus.
- Students should use the Gradescope app on their smart phones to submit written work from exams.
 - Do NOT close out of the exam in Blackboard until after you submit your work in Gradescope.
 - If a student closes out of the exam in Blackboard prior to submitting their written work in Gradescope, they will earn a 0 on that test.

Final Exam

- The final exam is comprehensive and must be completed on Friday July 5th.
 - Only a 24-hour window to take the final exam
 - o 2.5 hour testing time
- Utilize HonorLock.
- Students should use the Gradescope app on their smart phones to submit written work from exams.
 - Do NOT close out of the exam in Blackboard until after you submit your work in Gradescope.
 - If a student closes out of the final exam in Blackboard prior to submitting their written work in Gradescope, they will earn a 0 on that test.
- 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.

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.
 - o Ex: Student misses a guiz in class because they were late or absent from class.
- Make-up work is given at the discretion of the instructor.
- NO make-up assignments are given without prior notification AND proper documentation.
- If you miss an assignment and have given prior notification and proper documentation to justify
 the reason you missed the assignment, you MUST make arrangements BEFORE the end of the
 week to make up whatever you have missed.

SPC Attendance Policy

- Students are expected to 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.

Submitting Documents Online (Gradescope)

- Download the Gradescope app onto your smart phone.
 - o Log-in with your SPC credentials, just like you log into Blackboard.
- Students will be required to upload written work to Gradescope (notes, exams, etc.).
- 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 for <u>exams</u>.
- 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.

Calculators

- There **will** be times throughout the term when students will need a <u>graphing</u> 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.

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.
 - o "Cheating" includes, but is not limited to, using PhotoMath, MathWay, WolframAlpha, ChatGPT, or any other artificial intelligence to do work assigned in this class.
- Student may be administratively dropped from the class and will receive an X or F.

Virtual Assessments using HonorLock (The Rules!!)

- 1. Your camera must be on, and you must be visible in the frame during the **entire** assessment.
- 2. Your camera must be positioned in such a way as to show your entire workspace. I need to see your face and your desk area during the entire assessment. This can be done by pushing your computer a few feet backwards away from you. If you have a computer that can flip backwards, this can help you to position yourself properly in the camera.
- 3. Your cell phone and smart watch (if applicable) should be **face down** on your workspace but **in view of the camera** during the entire assessment. You should silence your devices (or turn them off entirely) so as to not have them distract and/or tempt you during the assessment.
- 4. Make sure you are in a properly lit area. The camera should show you very clearly. If you need more light, consider putting your computer in front of a window such that your face is towards the window.
- 5. There should not be anyone else near you or interacting with you during the assessment. Please ensure your family/friends know you are taking a timed and recorded assessment as to not have them disrupt your work during the recording.
- 6. You will need your photo ID before you can start the assessment. HonorLock will have you present your ID to the camera for visual confirmation. You can then use the ID as a straight edge while you are working on the assessment if you need one.
- 7. Be sure to use the Gradescope app on your phone to submit your written work PRIOR to closing out of HonorLock.
- 8. All tests are to be done using HonorLock unless explicitly indicated by the instructor.

ANY violation of any of the rules listed above will result in an immediate 0 on the assignment.

South Plains College Common Course Syllabus: MATH 1324 Revised December 2022

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, Downtown Center, 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 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)

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.

Week	Day	Date	Торіс	Notes/Homework	Notes Due on Gradescope (by 11:59pm)
1	Monday	June 3	Solving Linear Inequalities; Graphs & Equations of Lines	1.1 – 1.2	Tuesday, June 4
	Tuesday	June 4	Functions; Linear Business Applications	1.3	Tuesday, June 4
	Wednesday	June 5	Systems of Linear Equations & GJE	1.4	Wednesday, June 5
	Thursday	June 6	Applications of GJE	1.5	Thursday, June 6
	Friday	June 7	Matrix Operations and Applications (Input/Output Analysis)	1.6	Friday, June 7
2	Monday	June 10	Exam 1	Unit 1	Open: June 8 th 12am Closes: June 10 th 11:59pm
	Tuesday	June 11	Graphical Linear Programming	2.1	Tuesday June 11
	Wednesday	June 12	Linear Programming Simplex Method	2.2	Wednesday, June 12
	Thursday	June 13	Linear Programming Two-Phase Method	2.3	Thursday, June 13
	Friday	June 14	Sets, Probability, Expected Value; Markov Chains	2.4 – 2.5	Friday, June 14
3	Monday	June 17	Exam 2*	Unit 2	Open: June 15 th 12am Closes: June 17 th 11:59pm
	Tuesday	June 18	Quadratic Functions and Applications	3.1	Tuesday, June 18
	Wednesday	June 19	Polynomial Functions & Applications	3.2	Wednesday, June 19
	Thursday	June 20	Rational Functions & Applications	3.3	Thursday, June 20
	Friday	June 21	Review – STUDY!!		
4	Monday	June 24	Exam 3	Unit 3	Open: June 22 nd 12am Closes: June 24 th 11:59pm
	Tuesday	June 25	Exponential Functions & Applications	4.1	Tuesday, June 25
	Wednesday	June 26	Logarithmic Functions & Applications	4.2	Wednesday, June 26
	Thursday	June 27	Exponential & Logarithmic Equations and Applications	4.3	Thursday, June 27
	Friday	June 28	Simple and Compound Interest	4.4	Friday, June 28
5	Monday	July 1	Annuities	4.5	Monday, July 1
	Tuesday	July 2	Holiday – Review – STUDY!!		
	Wednesday	July 3	Exam 4*	Unit 4	Open: July 2 nd 12am Closes: July 3 rd 11:59pm
	Thursday	July 4	Review – STUDY!!		
	Friday	July 5	Final Exam*	Comprehensive	Open: July 5 th 12am Closes: July 5 th 11:59pm

Last day to drop a class: June 27th

Exams with a * can be done with the use of a handwritten 3" by 5" notecard.

Remember, use the Gradescope app to submit your written work on Exams while still being recorded in HonorLock. Do not click "submit" on the exam in Blackboard until after your work is submitted in Gradescope.