

**South Plains College**  
**Common Course Syllabus: MATH 1324**  
**Summer II 2020**

**Department:** Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

**Course Number:** MATH 1324

**Course Title:** Mathematics for Business and Social Sciences

**Available Formats:** conventional 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 TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0320.

**Credit:** 3 **Lecture:** 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

**Attendance Policy:** If the student is inactive in the course (no progress on homework, misses exams, misses quizzes) for 4 consecutive days (M-F) or 5 days total (M-F), the instructor has the right to drop the student with a grade of F or an X, depending on his/her discretion.

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 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 [cgilster@southplainscollege.edu](mailto:cgilster@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.

**Math 1324.151 MTWR Syllabus**  
**Mathematics for Business, Economics, Life and Social Sciences**

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

**Office Hours:** On Zoom by appointment

**Textbook:** This section does NOT require you to purchase a physical textbook. All resources are online through MyMathLab.com (the online homework system) or in your class notes found on Blackboard. You can purchase a physical copy of the book if you desire (see first page of syllabus), but an electronic copy is available online after you gain access to MML.

**Supplies:** You will need a working computer with webcam and microphone for this class. You will need reliable internet access, a graphing calculator (I recommend TI-84 series), and a printer.

**Course Requirements:** To maximize the potential to complete this course, a student should join all live Zoom class meetings when offered. Every student should take notes while watching the lecture videos that are posted on Blackboard, and complete all homework assignments on MyMathLab and examinations through Blackboard including the final exam in the allotted time.

<b>Grading:</b>	Tests (3 total)	70%	<b>Grading Scale:</b>	A 90-100
	Exam 1	35%		B 80-89
	Exam 2	20%		C 70-79
	Exam 3	15%		D 60-69
	Homework/Quizzes	10%		F 59 or below
	Final Exam	20%		

*\*\*\*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. Access to MyMathLab is found through your Blackboard course. Homework is to be completed by the due dates posted on each assignment. It is the responsibility of each student to keep track of due dates and to be sure to submit their work on time. No late homework will be accepted. The use of any math 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!!

**Course ID: groves37082**

**Proctorio:** We will be utilizing a program called Proctorio to ensure academic honesty. This program will utilize your webcam on your computer to record you and your workspace during each exam. You **MUST** have a working computer, a working webcam, and a working microphone. Tablets are unlikely to work well since you cannot position the tablet to view both you and your workspace well. **You must show both you and your workspace while testing** or taking any assessment on which the instructor requires the use of Proctorio.

### **Steps to taking an exam/quiz using Proctorio:**

1. Open and log into Blackboard. Navigate to our class.
2. Click on the Proctorio link on the left side of the page. It should tell you Proctorio is installed and ready to use. Click the home icon on the upper left side of the screen.
3. Click on Exams and open the exam you wish to take. Click BEGIN to start the Proctorio pre-checks.
4. Do NOT close out the Blackboard tab or you will be removed from the exam! Do not refresh the page, either!!
5. Submit the exam in Blackboard.

**Quizzes:** Any quizzes in this class will be considered “pop” and administered on MyMathLab. You will be given no less than 24 hours notice of a quiz.

**Tests:** There will be a total of 3 exams in this course. No notes/homework/textbooks will be allowed on ANY exam. All exams are expected to be completed in the allotted time, no exceptions. No exam grades will be dropped. ***If you do not take the final exam, you will fail the class regardless of your average at the time of the final.*** You need to scan your written work and upload it to Blackboard under the Exams folder where it says Exam *n* Written Work within 30 minutes of submitting the exam. Once you upload a document, it cannot be deleted or altered. I recommend using a PDF scanning app such as CamScanner to do this. Your work should be in PDF format (NOT JPEG) and should be ONE DOCUMENT, not several documents of one page each. We will do a trial run of this process at the start of the term so that you understand what is expected and how to do this. Failure to submit your written work as indicated above can result in you earning a zero on the exam(s).

**Late work:** Late work is not accepted. If you do not turn in an assignment on time, you will receive a zero.

**Class Notes:** The class notes (outline) will be posted on Blackboard for you to print. Each lecture video will cover some or all of these notes but filled-in notes will NOT be posted online. It is your responsibility to watch the lectures and complete your own notes.

**Lectures:** The instructor has created short lecture videos covering some or all of the problems found in the notes for each section. There can be more than one video per section of notes. These videos are posted on Blackboard in a file titled **Lecture Videos**. It is entirely the responsibility of the student to watch these videos and keep up with the material per the schedule on the last page of this syllabus.

**Remind:** I like to utilize a free app called Remind. You can download it on your phone. I will use it to send daily reminders to do you help keep you on track. You can also message me through the app to ask for help and to easily send me your questions. It is a quick chat app that doesn't require us to share phone numbers. I highly recommend every student download this app and get into the course I created for us this term.

**Class Name: Math 1324 Summer 2 – 2020**  
**Class code: @ 7g6f3d**

**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.

**Bonus Points:** As an incentive to keep up with your assignments every day and not to procrastinate your work, you will be given 1 bonus point for every homework assignment that is completed (100%) by 7am the day after that assignment is covered on the syllabus. For instance, section 1.2 is supposed to be studied on Monday July 13<sup>th</sup>. If you complete the 1.2 assignment by 7am on Tuesday July 14<sup>th</sup>, you will get 1 bonus point on your next exam.

**No work, no credit!!**

Please note, I do not answer e-mails on Sundays.

<b>Tentative Calendar for Math 1324 – Summer II 2020</b>			
<b>Day</b>	<b>Date</b>	<b>Topic</b>	<b>Notes &amp; HW</b>
Wednesday	July 8	<b>Zoom:</b> Introduction/First Day Assessment	Syllabus, First Day Assessment
Thursday	July 9	Graphs, Equations of Lines, & Functions	1.1
Friday	July 10	Linear Inequalities & Linear Business Applications	1.2
Monday	July 13	Quadratic Functions, Polynomial Functions	1.3
Tuesday	July 14	Unit 1 Review	
Wednesday	July 15	Rational Functions	2.1
Thursday	July 16	Exponential Functions and Applications, Logarithmic Functions & Properties	2.2
Friday	July 17	Exponential & Logarithmic Equations	2.3
Monday	July 20	Review for Exam – Zoom Meeting 11am	
Tuesday	July 21	<b>Exam 1 – Use Proctorio</b>	<b>Units 1 &amp; 2</b>
Wednesday	July 22	Simple and Compound Interest	3.1
Thursday	July 23	Annuities	3.2
Friday	July 24	Systems of Linear Equations (2x2), Gauss-Jordan Elimination, Applications of Systems	3.3
Monday	July 27	Review for Exam – Zoom Meeting 11am	
<b>Tuesday</b>	<b>July 28</b>	<b>Exam 2 - Use Proctorio</b>	<b>Unit 3</b>
Wednesday	July 29	Matrix Operations, Inverses, and Input-Output Analysis	4.1
Thursday	July 30	Graphing Linear Inequalities Linear Programming: Graphical Method	4.2
Friday	July 31	Graphical Linear Programming Review	
Monday	Aug 3	Linear Programming: Simplex Method	4.3
Tuesday	Aug 4	Review for Exam – Zoom Meeting 11am	
<b>Wednesday</b>	<b>Aug 5</b>	<b>Exam 3 - Use Proctorio</b>	<b>Unit 4</b>
Thursday	Aug 6	Linear Programming: Two-Phase Nonstandard	5.1
Friday	Aug 7	Sets, Probability, Expected Value, Markov Chains	5.2
Monday	Aug 10	Review Unit 5	
<b>Tuesday</b>	<b>Aug 11</b>	<b>Quiz over Unit 5 – Use Proctorio</b>	<b>Unit 5</b>
<b>Wednesday</b>	<b>Aug 12</b>	<b>Final Exam</b>	<b>Units 1 - 5</b>

\*Last Day to drop: August 3<sup>rd</sup> (Monday)