South Plains College
MATH .342/1324-C602 (Mathematics for Business and Social Science)
Fall 2026

Instructor: Taek Hyun Jang, PhD.

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Office: B014 (Downtown Campus, Lubbock)

Office Hours:

• Monday - Thursday:	Downtown Campus **(B014)**	9:30 AM – 10:30 AM 3:00 PM – 4:00 PM
• Friday	Downtown Campus (**B014**)	10:00 AM – 11:00 AM

- Virtual or Face-to-Face meeting by appointment

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, Plainview, Lubbock 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 (not required):
Mathematics with Applications in Business and Social Sciences, Hawkes Learning.
Mathematics with Application in Management, Natural and Social Science 13th ed, Pearson

Supplies:

- A calculator is required for class, assignments and exams. The math department recommend TI-83+ or TI-84+, but many others are also acceptable
- Cell phones and similar devices may NOT be used as calculators.
- Paper, pencils, erasers and 3-ring binder.
- Access to smartphone or scanner (for uploading assignments).

Class Materials: Blackboard is the online course management system that will be utilized for this course. This course syllabus and all class materials can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. Your user name and password should be the same as your MySPC and SPC email logins:

User name: first initial, last name, and last 4 digits of the Student ID
Password: Original Campus Connect Pin No. (found on SPC acceptance letter), unless already changed

Questions regarding Blackboard support may be emailed to blackboard@southplainscollege.edu or by telephone to 806-716-2962.

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:

Assessment		**Grading Scale**	
Assignment (In-Class & Homework):	20%	90 – 100	A
Unit Exams	60%	80 – 89	B
Final Exam:	20%	70 – 79	C
		60 – 69	D
		Below 60	F

Note: Math 0324 will be graded as Pass/Fail. If a grade of A, B, or C is earned in Math 1324, then a grade of Pass will be awarded in Math 0324. If a grade of D or F is earned in Math 1324, then a grade of Pass or Fail will be awarded for Math 0324 at the instructor's discretion. If you pass MATH 0324 but do not pass the MATH 1324 portion, you will be able to register for MATH 1324 in future semesters.

Assignment Format and Policy: Assignments are given after each lesson and are collected according to the tentative course schedule.

For Homework Assignments:

- Homework will be assigned daily to practice and fully understand each topic mentioned during the regular class period.
- It is available on the Blackboard.
- Points will be lost for incomplete attempts or missing work.
- Due dates will be posted on the Blackboard and/or Gradescope page.
- Students should submit the assignment in Gradescope as a single pdf file using the Gradescope app.

For In-Class Assignments:

- In solving the problem, show all detailed work.
- Clearly mark your answer.
- Check your answers in Blackboard to make certain you are practicing the exercises correctly.
- Write your name at the top of each page of your work.
- Submit the assignment in Gradescope as a single pdf file using the Gradescope app.
- Make certain to complete and submit assignments on time (or early).

Exam Format and Policy:

- There will be eight unit exams in this course.
- Exams must be taken at the days and times listed on the tentative course schedule.
- No make-up exams will be given.
- If exam missed due to college event, the exam grade will be replaced with the average of other exams.

Final Exam:

- The comprehensive final will be given on December 7th from 10:15 AM to 12:15 PM.
- No make-up final will be given.

- Any student who does not take the final exam will fail the classes with F's regardless of the student's average.

Make-up Exam: NO make-up exams are allowed without prior notification AND proper documentation. If students are absent from the exam, have given prior notification and proper documentation of your absence, you MUST make arrangement to take the exam within ONE WEEK. After one week, the exam grade is assigned to zero in the blackboard grade.
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 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 rcanon@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 0324/1324: Mathematics for Business and Social Science Tentative Class Schedule

Week	Date	Topics
1	8/24 (M)	**Syllabus** 1.1: Integer Rules, Fraction Multiplication & Division
	8/25 (T)	1.2: Fraction Addition & Subtraction, Order of Operations
	8/26 (W)	1.3: Exponent Properties
	8/27 (R)	1.4: Radical Properties
2	8/31 (M)	1.5: Polynomials: Add, Subtract, Multiply Radicals: Add, Subtract Factoring: GCF, Trinomials
	9/01 (T)	1.6: Factoring with Leading Coefficient not 1, Special Products
	9/02 (W)	1.7: Factoring Summary
	9/03 (R)	**Unit 1 Exam**
3	9/07 (M)	Labor Day Holiday – All Campuses closed
	9/08 (T)	2.1: Rational Expressions
	9/09 (W)	2.2: Solving Linear and Absolute Value Equations
	9/10 (R)	2.3: Solving by Factoring, Quadratic Formula
4	9/14 (M)	2.4: Solving by Square Root Property, Complete the Square
	9/15 (T)	2.5: Solve Rational Equations
	9/16 (W)	Review for Unit 2 Exam
	9/17 (R)	**Unit 2 Exam**
5	9/21 (M)	3.1 The Coordinate Plane, Slope, Intercepts, & Equations of Lines
	9/22 (T)	3.2 Linear Equations in Two Variables
	9/23 (W)	3.3 Forms of Linear Equations and Graph
	9/24 (R)	3.4 Parallel and Perpendicular Lines
6	9/28 (M)	3.5 Finding Linear Equations
	9/29 (T)	**Unit 3 Exam**
	9/30 (W)	4.1 Introduction to Functions 4.3 Linear Functions
	10/01 (R)	Application of Linear Functions
7	10/05 (M)	4.4 Quadratic Functions and Applications of Quadratic Functions
	10/06 (T)	*4.6 Transformation of Functions* 4.7 Polynomial Functions
	10/07 (W)	4.8 Rational Functions
	10/08 (R)	**Unit 4 Exam**
8	10/12 (M)	5.1 Exponential Functions and Graphs
	10/13 (T)	5.2 Application of Exponential Functions
	10/14 (W)	5.3 Logarithmic Functions and Graphs
	10/15 (R)	5.4 Applications of Logarithmic Functions

Week	Date	Topics
9	10/19 (M)	6.1 & 2 Simple and Compound Interest
	10/20 (T)	6.3 Annuities: Present and Future Value
	10/21 (W)	6.4 Borrowing Money (Loan & Amortization)
	10/22 (R)	**Unit 5 & 6 Exam**
10	10/26 (M)	7.1 & 2 Solving System of Linear Equations
	10/27 (T)	Gauss Jordan Elimination
	10/28 (W)	Application of Systems of Linear Equations
	10/29 (R)	7.4 Basic Matrix Operations
11	11/02 (M)	7.5 Inverses of Square Matrix 7.6 Leontief Input-Output Analysis
	11/03 (T)	**Unit 7 Exam**
	11/04 (W)	8.1 Linear Inequalities in Two Variables 8.2 Linear Programming: The Graphical Method
	11/05 (R)	Applications of graphical method
12	11/09 (M)	8.3 The Simplex Method: Maximization
	11/10 (T)	Applications of standard maximization
	11/11 (W)	8.5 The Simplex: Mixed Constraints
	11/12 (R)	Application of nonstandard maximization and minimization
13	11/16 (M)	**Unit 8 Exam**
	11/17 (T)	9.3 Introduction to Probability
	11/18 (W)	9.6 Probability Rules
	11/19 (R)	10.1 Expected Values
14	11/23 (M)	10.2 Markov Chains
	11/24 (T)	**Unit 9 & 10 Exam**
	11/25 (W)	Thanksgiving – All Campuses closed
	11/26 (R)	No class
15	11/30 (M)	Review for Final
	12/01 (T)	Review for Final
	12/02 (W)	Review for Final
	12/03 (R)	Review for Final Last day to drop Fall courses (12/03)
16	12/07 (M)	Final Exam Week
	12/08 (T)	
	12/08 (W)	Final Exam (MATH 0324) – 10:15 AM to 12:15 PM
	12/09 (R)	Final Exam (MATH 1324) – 10:15 AM to 12:15 PM