MATH 1324 Mathematics for Business and Social Sciences

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Office Hours: see below

Prerequisites: two years of high school algebra or successful completion of MATH 0320

Materials: Mathematics with Applications in the Management, Natural, and Social Sciences 12th ed. by Lial, Hungerford, Holcomb, Mullins Suitable writing materials (all turned in work must be written in *pencil*) and *two* notebooks: one for notes, and one for homework problems. Calculators with exponential and logarithmic functions are required. Graphing Calculators are permitted but not required.

Office Hours: Office hours are not held during the summer session. I will, however, be available in the classroom from 1-2 hours after the last class ends unless nobody stays afterward. You may use this time to ask questions, seek additional explanations, or any other topic that you would normally use office hours for. I will not, however, answer any questions about grades/class standing. To get information about your grade, you must inquire via email.

Core Curriculum: This course satisfies the following Core Objectives: Communication Skills:

- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through oral communication
- Develop, interpret, and express ideas through visual communication

Critical Thinking:

- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

Empirical and Quantitative Competency Skills:

- Manipulate and analyze numerical data and arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

Expected Learning Outcomes: At the end of this course, students should be able to competently perform the following:

- 1. Demonstrate and apply knowledge of properties of functions, including domain and range, and their applications. Especially as it pertains to cost, revenue, profit, supply and demand.
- 2. Recognize and apply quadratic functions and their properties to business and social science applications, including optimization.

- 3. Apply techniques for solving exponential and logarithmic equations, applying them to problems of exponential growth and decay.
- 4. Properly use and understand formulas relating to simple and compound interest, including bond discounts, present and future value of annuities, and amortization of loans.
- 5. Solve systems of equations with graphing, algebra, and matrix methods.
- 6. Set up and solve linear programs with graphical and matrix methods.
- 7. Understand the basics of data and probability, and their application to expected value and Markov chains.

IT IS THE RESPONSIBILITY OF THE STUDENT TO BE FAMILIAR WITH SOUTH PLAINS COLLEGE POLICIES. BELOW ARE ITEMS SPECIFIC TO THIS COURSE

Assessment: Grading will be done according to the standard 10 percent scale (i.e. 100% - 90% is an A, etc.) with assignments weighted according to the following scale

Participation	16%
Tests	16%each
Final Exam	20%

Class Attendance: Students are responsible for the material covered in this course. A student missing 4 class days without continuing notification will be dropped from the course. If you feel that you need to drop the class, the last day to drop is June 24.

Participation: Participation consists of mainly of quizzes, but may be expanded (at the instructor's discretion) to include classroom engagement, problems presented on the board, and other assessment methods.

Study Habits/Homework: In order to succeed in any mathematics class, diligent study is required. This can range from re-writing or summarizing topics from memory, re-reading course materials, or doing problems. Doing problems correctly and frequently is by far the most effective method to learn and improve in mathematics. In general, the recommendation is that students study 2-3 hours per day for every hour spent in the classroom. It should be noted that some students may need more time per day to study over certain topics, and you should be diligent in observing how much study time you really need.

All of the semester's homework is already available on Blackboard (see the "Homework" tab on Blackboard), and is organized by class day. Answers (not solutions) are provided to check your performance.

Quizzes: Quizzes will be given daily at the beginning of class to assess your understanding of prior material. Nearly every question asked on a quiz will be taken from the homework directly. You may use your homework, notes, and textbook as a reference for any quiz. There are no make-ups for missed quizzes for any reason.

Exams: There will be four midterm exams given during this course. Questions will be typically be similar to assigned homework problems. Notes/formula sheets will not be permitted during exams except as the instructor provides them directly. During exams cell phones, laptops, and other such objects should be turned off and put away. There is no tolerance for violations. Students who break these rules will be asked to leave the exam (counted as an un-notified absence) and receive a zero for their exam grade. *Makeup exams are not given*.

Final Exam: The final exam is comprehensive, and a required part of the course. Failure to take the final exam results in an automatic F. The Final Exam will be given on Tuesday, July 9, 4pm - 6pm.

Extra Credit: In general, extra credit is not offered. Exams may include one or more bonus questions.

Civility in the classroom: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Given that students may be asked to present material as a part of the course, and contribute openly in class, troublesome behavior will not be tolerated. At a minimum, this includes use of cell phones, making offensive remarks, reading newspapers, arriving late, leaving early or engaging in any other form of distraction. Infractions will be dealt with proportionally to the offense, and may include dismissal from that class period (which will count as an absence on your attendance record). Tobacco products of any kind (including vapor-pens or other electronic substitutes) are not permitted in the classroom.

Honesty: "Scholastic dishonesty" includes but is not limited to cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student. Incidents of academic dishonesty will be promptly reported and dealt with.

Campus Resources: Students have access to tutoring in M116 on the Levelland campus, or Building 4 on the Reese campus.

Sexual Misconduct: By law all faculty members are mandated reporters of any incidents of sexual misconduct. That means that faculty cannot keep information about sexual misconduct confidential if you share that information. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

Campus Concealed Carry: 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, please refer to the SPC policy at: http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.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.

ADA Compliance: Levelland Campus – 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 to federal law, a student requesting accommodations must provide acceptable documentation of his/her disability. For more information, call or visit the Disability Services Office in the Student Services Building, 806-716-2577.

Reese Center and Lubbock Center – 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 to federal law, a student requesting accommodations must provide acceptable documentation of his/her disability. For more information, call or visit the Disability Services Office in Rooms 809 and 811, Reese Center Building 8, 806-716-4675.

Sheet1

Business Math – 1324

Date	Topic
06/03/19	Algebra Review
06/04/19	Intro to Functions/Linear Functions
06/05/19	Quadratic & Polynomial Functions
06/06/19	Rational Functions
06/10/19	Exam 1
06/11/19	Exponential and Logarithmic Function
06/12/19	Simple/Compound Interest
06/13/19	Annuities
06/17/19	Exam 2
06/18/19	Systems of Linear Equations
06/19/19	Matrix Arithmetic and Inverses
06/20/19	Matrix Algebra, Input-Output Analysis
06/24/19	Exam 3
06/25/19	Introduction to Linear Programming
06/26/19	Linear Programming – Simplex Method
06/27/19	Linear Programming – Dual and Non-Standard Problems
07/01/19	Exam 4
07/02/19	Sets, Data, Probability
07/03/19	Expected Value and Markov Chains
07/04/19	Independence Day – Holiday
07/08/19	Final Review
07/09/19	Final Exam