Math for Business and Economics, Mathematics 1324, Section 006 Fall 2025

Instructor: Bryan Barrios Office: Math Learning Center Email: bbarrios@uttyler.edu

Course Schedule: Tues/Thurs: 12:30pm - 1:50pm, RBN 3040

Office hours: Tues/Thurs 1:55pm - 2:30pm @ MLC (or by appointment, I'm normally around in the MLC on MWF)

Text: (NOT REQUIRED) College Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th edition, Prentice Hall by Barnett, Ziegler, and Byleen. Textbook ISBN-13: 9780134674148.

Note: Homework will be uploaded, no need to buy code. I will be using the book to write my notes only.

Course Description: Topics include review of basic algebraic concepts, linear equations and inequalities, mathematics of finance, matrices, introduction to linear programming.

Course Prerequisites: Two years of high school algebra, satisfactory score on SAT, ACT, or THEA.

Course Outline: Chapters 1-5 of the text and other chapters, in part or in full, as time permits

Student Learning Outcomes: By the end of this course, the successful student should be able to:

- Demonstrate knowledge of basic functions (polynomial, exponential, and logarithmic)
- Visually, numerically, and symbolically determine solutions to systems of linear equations and inequalities as well as find the optimal value of a linear function subject to constraints.
- Use the basic principles of logic and counting to create and evaluate simple probabilistic models
- Apply the above to develop and analyze models in business scenarios

Required Materials: Scientific (non-graphing) calculator, graphing calculators will not be permitted.

Approximate Course Schedule:

Week	Textbook Sections
1	1.1 , 1.2
2	1.3, 2.1
3	2.1 continued, 2.2, 2.3
4	Exam 1, 2.3 continued, 2.4
5	2.5, 2.6
6	2.6 continued, 3.1
7	3.2, 3.3
8	Exam 2, 4.1
9	4.1 continued, 4.2, 4.3
10	4.3 continued, 4.4
11	4.5, 4.6
12	Exam 3 , 4.6 continued, 5.1
13	5.1 continued, 5.2, 5.3
14	Thanksgiving holiday week
15	5.3 continued, 8.1, 8.2
16	Finals Week

Grading: Scores will be posted on Canvas. After the end of the semester, final course grades will be available on my.uttyler.edu. A final course grade of 90% is guaranteed to be at least an A, a final course grade of 80% is guaranteed to be at least a B, a final course grade of 70% is guaranteed to be at least a C, and a final course grade of 60% is guaranteed to be at least a D. All grades below D will be F. The breakdown of your final course grade into categories is given below.

Homework: 10% Quizzes: 15%

Midterm exams: 15% each

Final exam: 30%

If you have any questions about the grading of a particular quiz or exam, you must contact me no more than one week after the day I return the graded assignment in class, whether you are present during that class or not.

Attendance: It is your responsibility to attend class. Attendance is not mandatory but it effects eligibility for grade curve if I determined towards the end of the course. I will be taking attendance each morning and keeping tract of it but it does not effect your grade overall. This means, among other things, coming to class on time and prepared. Before class begins, you should turn off cell phones and any other electronic devices. Students are responsible for all announcements made during lecture.

Homework: Homework will be assigned per week. It will be uploaded on canvas. It will consists of multiple problems but only one or two questions will be graded. For example, suppose 10 questions were assigned. If you only do problems 1,3,6,and 10

theirs a probability that I'm grading one or two of those which I will not count off for not completing 2,4,6,7,8, and 9. But theirs a catch, after each homework assignment I will choose somebody randomly to present their work for a problem that was not graded.

Quizzes: There will also be quizzes but with a twist. These will be pop quizzes given randomly with at most one per week. Quizzes will only consist of material given the week before.

Exams: There will be 3 midterm exams and 1 final exam.

Final Assessment: TBA

Cell Phones: Just please silence your phones

Calculators: You are required to bring a calculator for use on quizzes and exams. I recommend a scientific calculator but no graphing. The use of graphing calculators and other electronic devices, including cell phones, during exams is strictly prohibited, so study accordingly. If you have another calculator model that you would like to use, you must have it approved by me before using it while completing quizzes/exams.

Absences: Make-ups for documented absences that are required as part of a UT Tyler obligation (e.g. athletes participating in an event, students participating in a debate contest, etc.) or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week and documentation are required. Other make-ups are granted only in extreme cases and at the sole discretion of the instructor. Prior notification is still required. Under no circumstances will make-ups be granted without prior notification. Leaving early for a break is NOT grounds for a make-up, so please make your travel plans accordingly. In almost all cases, missed work will be assigned a 0.

Academic Integrity: Your work must be your own. Violations will be processed according to the established guidelines of the department, college, and university. Violations of academic integrity include, but are not limited to, cheating, fabrication, or plagiarizing. A range of academic sanctions may be taken against a student who engages in academic dishonesty. Below are ideas related to academic integrity.

Resources you are encouraged to utilize in this course include the textbook and unassigned problems, notes from class, assigned homework problems, your fellow Math 1324 students, the Math Learning Center, and your instructor. E-mail is the best way to contact me.

A note about a resource NOT allowed in this course: while the internet may be a valuable resource, using it to unethically acquire answers for your work will be considered a violation of academic integrity and processed accordingly. Similarly, copying answers from other students' assignments, past or present, violates the idea that your work must be your own.

University Policies: Monday, September 9 is this semester's Census Date, the deadline for all registrations, schedule changes, and section changes. Monday, November 9 is the last day to withdraw from one or more courses. For university policies concerning Students' Rights and Responsibilities, Grade Replacement/Forgiveness, State-Mandated Course Drop Policy, Disability Services, Student Absence due to Religious Observance, Student Absence for University-Sponsored Events and Activities, Social Security and FERPA Statement, please see the University Policies and Information file on this course's Canvas page.

Course Policy Regarding AI:

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified or this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, AI is **not permitted** for exams and quizzes (which should be obvious).

Notice: All policies and information above provide general guidelines for the course and may be amended throughout the course as needed at the discretion of the instructor. Any changes will be directly communicated to students through email, announcement in Canvas, or verbally in the classroom.