## Math for Business and Economics, Mathematics 1324, Section 003 Fall 2024

Instructor: Dr. William Blair Office: RBN 4008 Email: wblair@uttyler.edu

Course Schedule: Class meets in HPR 00253 MoWeFr 9:05 AM - 10:00 AM.

Course Website: You MUST activate your Canvas account. To do so, go to https: //uttyler.edu/canvas. This is also the address to login. If you are registered in the course, you already have access to the course. All important documents will be posted on Canvas.

Office hours: MWF 2:00 - 3:00 RBN 4008 (or by appointment)

**Required Text:** College Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th edition, Prentice Hall by Barnett, Ziegler, and Byleen. Textbook ISBN-13: 9780134674148.

Note: Paper book is not required. You will need to purchase MyLab Math access code (instructions are posted on Canvas). Once you purchase the access code you will have access to e-book and online homework. Online homework is required for this class.

**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:** MyLab Math access code, scientific (non-graphing) calculator, access to a computer with fast, reliable internet connection

## Approximate Course Schedule:

Week	Textbook Sections
1 (Aug 26 - 30)	1.1 , 1.2
2 (Sep  2 - 6)	(September 2 is Labor Day holiday, no class) 1.3, 2.1
3 (Sep 9 - 13)	2.1 continued, 2.2, 2.3
4 (Sep 16 - 20)	2.3 continued, 2.4
5 (Sep 23 - 27)	2.5, 2.6
6 (Sep  30 - Oct  4)	2.6 continued, 3.1, Review for Test 1
7 (Oct 7 - 11)	Exam 1 planned for October 7, 3.2
8 (Oct 14 - 18)	3.3, 4.1
9 (Oct 21 - 25)	4.1 continued, 4.2
10 (Oct 28 - Nov 1)	4.3, Review for Exam 2
11 (Nov 4 - 8)	Exam 2 planned for November 4, 4.4
12 (Nov 11 - 15)	4.5, 5.1
13 (Nov 18 - 22)	5.1  continued, 5.2, 5.3
14 (Nov 25 - 29)	Thanksgiving holiday week (no class)
15 (Dec 2 - 6)	5.3 continued, Review for final exam
16 (Dec 9 - 13)	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: 35% Quizzes: 20% Midterm exams: 10% each (there will be 2) Final exam: 25%

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 mandatory. 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 regularly via the online platform MyLab Math. Late homework will NOT be accepted.

**Quizzes:** There will also be quizzes assigned via MyLab Math. In contrast to homework, quizzes will have a much shorter time period to complete these assignments. There is the possibility that as the course proceeds there will be in-class paper quizzes. In the event that this occurs, you will be given sufficient notice of it happening.

**Exams:** There will be 2 midterm exams and 1 final exam.

**Final Assessment:** The final exam will likely be Monday December 9 8:00 a.m. 10:00 a.m. If this proves to be inaccurate, the correct date/time will be provided to you far enough in advance that you may make plans for it.

**Cell Phones:** Cell phones are not permitted in class. You must silence them and put them away before class begins.

**Calculators:** You are required to bring a calculator for use on quizzes and exams. I recommend a scientific calculator such as the TI-30XS. 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 Dr. Blair before using it while completing a graded assignment.

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. I reply to email from 9:00 A.M.-4:00 P.M. Monday–Friday.

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** in this course at all.

**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.

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