Math for Business and Economics I

MATH 1324.004 – Spring 2026

Instructor: Fara Meza
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Class Time: Tuesday & Thursday, 2:00 PM – 3:20 PM
Classroom: RBN 4025

Office Hours:

- Monday & Wednesday: 11:10 AM – 12:10 PM
- Tuesday: 1:00 – 1:50 PM
- Other times by appointment

Course Description

Topics include a review of basic algebraic concepts, linear equations and inequalities, mathematics of finance, matrices, and an introduction to linear programming.
Credit will not be given for both MATH 1324 and MATH 1314 or MATH 1332.

Prerequisite

Satisfactory score on SAT, ACT, or THEA.

Student Learning Outcomes

By the end of this course, successful students will be able to:

- Demonstrate knowledge of basic functions (polynomial, exponential, and logarithmic).
- Visually, numerically, and symbolically solve systems of linear equations and inequalities.
- Find optimal values of linear functions subject to constraints.
- Apply mathematical models to business and economic scenarios.

Required Materials

Textbook: *College Mathematics for Business, Economics, Life Sciences, and Social Sciences*, 14th Edition Barnett, Ziegler, Stocker, and Byleen (Prentice Hall)
ISBN-13: 978-0134674148

- Students must purchase a **MyLab Math access code**, which includes the e-book and online homework.
- Online homework is **required**.

Calculator: Scientific Calculator (Non-graphing calculator)

Grading

Category	Percentage
Homework	15%
Quizzes	15%
Exams	45%
Final Exam	25%

Grading Scale

- 90% and above: **A**
- 80% – 89%: **B**
- 70% – 79%: **C**
- 60% – 69%: **D**
- Below 60%: **F**

An "I" (Incomplete) grade will be given only in rare cases involving documented emergencies.

Attendance and Participation

Regular attendance is essential for success in this course. Students are expected to attend every class, arrive on time, and remain for the entire class period.

- Late work is **not accepted**.
- Make-up exams are **not given** except for official university or documented medical absences.

Quizzes

- One short quiz will be given weekly on Fridays.
- At the end of the semester, **one quiz grade will be dropped** (the lowest score or a missed quiz).

Homework

Homework will be completed online using **MyLab Math**. Assignments must be submitted by the posted deadlines.

Exams

There will be **three exams** plus a **comprehensive final exam**.

- **Exam 1:** Chapters 1–2
- **Exam 2:** Chapters 3–4
- **Exam 3:** Chapters 4, 5, and Sections 6.1–6.2

Final Exam Policy

The final exam is comprehensive.

No course letter grade may be **two or more letters higher** than the final exam grade.
Example: A C on the final exam limits the course grade to a B.

Important Dates

Date	Event
January 19	Holiday
March 9–13	Spring Break
March 30	Last day to withdraw from courses
April 28	Final Exam

Course Topics and Schedule

Exam 1 Topics

- 1.1 Linear Equations and Inequalities
- 1.2 Graphs and Lines
- 1.3 Linear Regression
- 2.1 Functions
- 2.2 Elementary Functions: Graphs and Transformations
- 2.3 Quadratic Functions
- 2.4 Polynomial and Rational Functions
- 2.5 Exponential Functions
- 2.6 Logarithmic Functions

Exam 2 Topics

- 3.1 Simple Interest
- 3.2 Compound and Continuous Interest
- 3.3 Future Value of an Annuity: Sinking Funds
- 4.1 Systems of Linear Equations in Two Variables
- 4.2 Systems of Linear Equations and Augmented Matrices
- 4.3 Gauss-Jordan Elimination

Exam 3 Topics

- 4.4 Matrices: Basic Operations
- 4.5 Inverse of a Square Matrix
- 4.6 Solving Matrix Equations
- 5.1–5.2 Linear Inequalities and Systems of Linear Inequalities
- 5.3 Linear Programming in Two Dimensions
- 6.1 Introduction to the Simplex Method

Classroom Policies

Students are expected to be respectful at all times.

- Turn off or silence cell phones.
- Avoid unnecessary talking and distractions.
- Arrive on time and stay for the full class period.

Artificial Intelligence Policy

The use of **artificial intelligence tools (including ChatGPT)** is **not permitted** in this course.

All submitted work must be entirely the student's own. Using AI tools at any stage of the work process, including brainstorming, is a violation of UT Tyler's Honor Code and academic honesty policies.

University Policies

For official university policies regarding Students' Rights and Responsibilities, Grade Replacement/Forgiveness, Course Drop Policy, Disability Services, Religious Observances, University-Sponsored Activities, and FERPA, please see:

http://www.uttyler.edu/academicaffairs/files/syllabuspolicy.pdf