# Math for Business and Economics – Seven-week Second Fall 2025 Math 1324.004

**Instructor:** Fara Meza **Office:** RBN 4049

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Class Time: MWF 11:15-12:10 pm and T Th 11:00 am -11:55 am

Classroom: RBN 4025

**Office Hours:** T Th 10:00-11:00 am and Thursday 1:00-1:50pm. Any other time by appointment.

**Course Description**: Topics include review of basic algebraic concepts, linear equations and inequalities, mathematics of finance, matrices, introduction to linear programming, Credit not 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, 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.
- Apply the above to develop and analyze models in business scenarios.

**Text:** College Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th edition, Prentice Hall by Barnett, Ziegler, Stocker and Byleen. Textbook ISBN-13: 9780134674148 Note: Paper book is not required. **You will need to purchase MyLab Math access code**. Once you purchase the access code you will have access to e-book and online homework. Online homework is required for this class.

### **Grades**

Your final grade will be determined by the following categories:

Homework	15%
Quizzes	20%
Exams	60%
Attendance and Participation	05%

The grade scale is:

90% or better	Α
80% to less than 90%	В
70% to less than 80%	С
60% to less than 70%	D
Less than 60%	F

Please note that an "I" grade will only be given in extremely rare circumstances caused by emergency situations (medical emergencies, etc).

# **Attendance and Participation**

Make sure you attend class every day is very important for your success.

Late work will not be accepted and make-up examinations will not be given except for official University or medical absences.

# Quizzes

Two quizzes will be given every week; At the end of the semester ONE quiz will be drop (The one with the lowest grades or the one that you miss)

#### Homework

Online homework using MyLab Math.

#### **Exams**

There will be three exams plus the Final Exam.

**Exam 1:** Chapters 1 and 2 **Exam 2:** Chapters 3 and 4

**Exam 3:** Chapter 4,5 and 6.1, 6.2

### **IMPORTANT DATES**

DATE	
October 13	First day for the second 7 week-session.
November 12	Last day to withdraw from one ore more courses for second 7 week-session.
November 24-28	Thanksgiving holiday
December 6	Final exam

**Attendance:** Make sure you attend class every day is very important for your success.

### **Course Material:**

MyLab access code, A non-graphing calculator.

Here are the topics covered in this course.

- 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 1

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 2

- 4.4 Matrices: Basic Operations
- 4.5 Inverse of a Square Matrix
- 4.6 Solving Matrix Equations
- 5.1 & 5.2 Linear Inequalities and System of Linear Inequalities in Two Variables
- 5.3 Linear Programming in Two Dimensions: A Geometric Approach
- 6.1 Introduction to the simplex Method

#### Exam 3

### **Classroom Policy**

Please be respectful of the students around you at all times. This means that you should turn your cellular phones' ringers off, and keep the classroom clear of distractions like unnecessary talking. Also, make sure you show up to class on time and stay the whole time.

# AI is not permitted in this course at all

I expect all work students submit for this course to be their own. Doing your own work, without human or artificial intelligence assistance, is best for your efforts in mastering course learning objectives. For this course, I expressly forbid using ChatGPT or any other artificial intelligence (AI) tools for any stages of the work process, including brainstorming. Deviations from these guidelines will be considered a violation of UT Tyler's Honor Code and academic honesty values.

*University Policies* For University policies concerning Students' Rights and Responsibilities, Grade Replacement/Forgiveness, State-Mandated Corse Drop Policy, Disability Services, Student Absence due to Religious Observance, Student Absence for University Sponsored Events and Activities, and the Social Security and FERPA Statement please see:

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