MAT 110: College Algebra
Syllabus - Summer 2022

Prerequisites	MAT 090 Intermediate Algebra
Duration	June 6 - July 15
Textbook:	*College Algebra*, 11th Edition - Ron Larson
	2022 Cengage Learning
Instructor:	Jorge Dioses
	Email: jdioses@cottey.edu
Office hours:	Via Zoom, available Monday through Friday by appointment

Description: This is an introductory course in algebra. We will study the basic concepts and techniques in algebra as well as their applications. Topics covered will include: equations and inequalities, mathematical modeling, functions and their graphs, linear and quadratic functions, exponential and logarithmic functions.

Learning Outcomes: In this course we will address the following Cottey College learning outcomes
- Solves Problems
- Thinks Critically
- Enriches Knowledge
- Communicates Effectively

eLearning: Materials relevant to the class will be posted to eLearning. These include: basic information, class notes, video lectures, study guides, and grades. You should visit eLearning for updates and announcements on a regular basis.

WebAssign: Homework assignments and tests will be delivered through the online platform WebAssign. Also, the electronic version of the textbook is included on WebAssign. The hard copy is optional. An access code will required to log into WebAssign. The access code can be purchased directly from Cengage, the publisher of WebAssign, or from the Cottey College bookstore.

Homework: Homework will be assigned weekly. Assignments will be posted each Monday at 12 AM CST and they will be due by 11:59 PM CST on the Friday of the same week. No late submissions will be accepted. All the assignments combined will be worth a maximum 200 points.

Tests: There will be three tests given at the end of the even (second, fourth, sixth) weeks. Each test will be available between Friday at 12 AM CST and Saturday at 11:59 PM CST of the corresponding week. Tests are times: you will be given a hundred and twenty (120) minutes to finish a test. Each test will be worth a maximum of 100 points.

Grading: In the calculation of the final grade, the following partial grades will be taken into account

Homework (H):   200 points
Test 1 (T1):   100 points
Test 2 (T2):   100 points
Test 3 (T3):   100 points

The total number of points (S) will be calculated by the formula

$$S = H + T1 + T2 + T3 + T4 - \min(T1, T2, T3, T4).$$

Letter grades will be assigned according to the following distribution

A	$465 \leq S \leq 500$
A−	$445 \leq S < 465$
B+	$430 \leq S < 445$
B	$415 \leq S < 430$
B−	$395 \leq S < 415$
C+	$380 \leq S < 395$
C	$365 \leq S < 380$
C−	$345 \leq S < 365$
D+	$330 \leq S < 345$
D	$315 \leq S < 330$
D−	$295 \leq S < 315$
F	$0 \leq S < 295$

Technology: A scientific calculator may be needed for solving some homework problems and taking exams. It is your responsibility to obtain the calculator's user manual and to familiarize yourself with its functions and capabilities.

Disclaimer: The instructor reserves the right to change this syllabus at his discretion after notifying the class in advance.

SCHEDULE

Week 1 (June 6 - June 10)	P.1 Review of Real Numbers and Their Properties P.2 Exponents and Radicals P.3 Polynomials and Special Products P.4 Factoring Polynomials
	Homework 1
Week 2 (June 13 - June 17)	1.1 Graphs of Equations 1.2 Linear Equations in One Variable 1.3 Modeling with Linear Equations 1.4 Quadratic Equations and Applications
	Homework 2
	Test 1
Week 3 (June 20 - June 24)	1.5 Complex Numbers 1.6 Other Types of Equations 1.7 Linear Inequalities in One Variable 1.8 Other Types of Inequalities
	Homework 3
Week 4 (June 27 - July 1)	2.1 Linear Equations in Two Variables 2.2 Functions 2.3 Analyzing Graphs of Functions 2.4 A Library of Parent Functions 2.5 Transformations of Functions
	Homework 4
	Test 2
Week 5 (July 4 - July 8)	3.1 Quadratic Functions and Models 5.1 Exponential Functions and Their Graphs 5.2 Logarithmic Functions and Their Graphs
	Homework 5
Week 6 (July 11 - July 15)	5.3 Properties of Logarithms 5.4 Exponential and Logarithmic Equations 5.5 Exponential and Logarithmic Models
	Homework 6
	Test 3