MATH 1111 - College Algebra
Hours Credit: 3 hours
Prerequisites: None
(80068) MATH-1111-07

Note: This course satisfies Area A2 of the Core Curriculum.

COURSE INSTRUCTOR

Instructor: Vanthu Tran
Office: Ingram Library 311
Email: vtran@westga.edu
Phone: (678) 839 - 3926

OFFICE HOURS

Monday and Wednesday: 1:00-3:00 p.m.
Tuesday and Thursday: 2:00-3:00 p.m.
Or by appointment

REQUIRED COURSE MATERIALS
TEXT AND OTHER REQUIRED COURSE MATERIALS.

TEXT: *College Algebra and Trigonometry, Abramson, Openstax.* Student can download for free at https://openstax.org/details/books/algebra-and-trigonometry. Students should go to "Download a PDF" and download the High Resolution version.

Courses Description

This course is a functional approach to algebra that incorporates the use of technology. Emphasis will be placed on the study of functions, and their graphs, inequalities, and linear, quadratic, piece-wise defined, polynomial, rational, exponential and logarithmic functions. Appropriate applications will be included.

Learning Outcomes

Students should be able to demonstrate:

1. Express relationships using the concept of a function and use verbal, numerical, graphical and symbolic means to analyze a function.
2. Model situations from a variety of settings by using polynomial, exponential and logarithmic functions.
3. Manipulate mathematical information, concepts, and thoughts in verbal, numeric, graphical and symbolic form while solving a variety of problems which involve polynomial, exponential or logarithmic functions.
4. Apply a variety of problem-solving strategies, including verbal, algebraic, numerical, and graphical techniques, to solve multiple-step problems involving polynomial, exponential, logarithmic equations and inequalities and systems of linear equations.
5. Shift among the verbal, numeric, graphical and symbolic modes in order to analyze functions.
6. Use appropriate technology in the evaluation, analysis and synthesis of information in problem-solving situations.

In addition, since this course satisfies Area A2 of the Core, upon successful completion of the course:

- Students demonstrate a strong foundation in college-level mathematical concepts and principles.
- Students demonstrate the ability to apply symbolic representations to model and solve real-world problems.

COURSE ASSESSMENT

Students' mastery of course learning outcomes will be assessed using the following methods:

Quizzes and Assignments	24%	(drop 3 lowest scores)
Tests – 4 as announced	51%	(drop 1 lowest score)
Comprehensive Final Exam	25%	

NOTE: Graphing calculators equivalent to the TI 83, 84, 85, and 86 will be allowed on the exam, as will scientific calculators. The TI-89 and other equivalent calculators will not be allowed.

Grading Scale:

90% - 100%:	A
80% - 89%:	B
70% - 79%:	C
60% - 69%:	D
<60%:	F

OTHER COURSE INFORMATION

Assignments/Quizzes: Homework is online, using MyOpenMath: https://www.myopenmath.com/. Check the announcement on CourseDen for registration information. Assignments for the week will be due on Sunday before midnight. You may turn in late assignments, with points deducted. All late assignments must be turned in by Sunday night before the given test. There will be in-class and/or take-home quizzes. Dates for the quizzes will be announced in class. There will be no make-up quizzes. If you are not present for a quiz or fail to turn in an assignment, a zero is recorded.

Tests/Exam: You must take tests on the specified date. Usually, makeup tests will not be given unless you miss a test for reasons that are serious, unavoidable, and beyond your control. **You must contact me before the next class meeting if you miss a test or a zero is recorded**. When possible, you should notify me before missing the work.
The final exam is a required class meeting that will not be rescheduled for discretionary reasons, including conflicts with work schedules, conflicts with classes and exams at other colleges, and travel plans.

COURSE POLICIES AND INFORMATION

University Policies and Academic Support

Please carefully review the following Common Language for all university course syllabi at the link:

https://www.westga.edu/UWGSyllabusPolicies/

It contains important material pertaining to university policies and responsibilities. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

Academic Honesty

NOTE: ALL FORMS OF ACADEMIC DISHONESTY SHOULD BE REPORTED AND THE STUDENT NOTIFIED.

Definitions of academic dishonesty are defined in the student handbook: www.westga.edu/handbook/

Disabilities Act/Accessibility for the Course

If you are a student whom is disabled as defined under the Americans with Disabilities Act and require assistance or support services, please notify me and provide me with a copy of your packet from Student Services. The university will provide you with resources for any audio/visual needs that you may have with the learning management system or course content.

Please contact UWG Accessibility Services for more information.

Student Conduct

Students are expected to abide by the guidelines detailed in the university catalog. Respect and courtesy are required of all students while in the classroom.

Attendance and Communication:

To provide all students with the most effective learning environment, you will be expected to be in class before instruction begins and to stay until the class is dismissed. If your schedule does not permit this to happen, you may need to change your schedule. If you miss a class, it is your responsibility to make up missed work. You are responsible for any material covered in your absence. Attendance will be taken and records will be sent to the Math Department. You are responsible for all announcements made in class and posted on CourseDen.

IMPORTANT DATES:

First Day of Class:	Wednesday, August 14
Drop Ends:	Tuesday, August 20
Last Day to Withdrawal with W:	Wednesday, October 9
Last Day of Class:	Friday, December 6
Final Exam Period:	December 7-13 (see The Scoop for specific times)
No classes:	Monday, September 2 (Labor Day)
	Thursday October 3 and Friday October 4 (Fall Break)
	Monday November 25- Friday November 29 (Thanksgiving)

TENTATIVE COLLEGE ALGEBRA SCHEDULE

(This schedule may be modified at any time with announcements in class, or in the CourseDen.)

Week	**Schedule**	**Content**
1 8/14	Syllabus	
2 8/19-8/21	1.2 1.3	Exponents Radicals and Rational Expressions
	1.3 continue 1.4	Radicals and Rational Expressions Polynomials
3 8/26-8/28	1.5	Factoring Polynomials
	1.6 2.2	Rational Expressions Linear Equations in One Variable
4 9/2-9/4	**9/2 No School**	
	2.2 continue	Linear Equations in One Variable
5 9/9-9/11	2.3 Review	Models and Applications
	Review **Test 1 (1.2 - 1.6 and 2.2 – 2.3)**	
6 9/16-9/18	2.4 2.5	Complex Numbers Quadratic Equations
	2.5 continue 2.6	Quadratic Equations Other Types of Equations
7 9/23-9/25	2.7 2.1	Linear Inequalities The Rectangular Coordinate System and Graphs
	4.1	Linear Functions
8 9/30-10/2	3.1 3.2	Functions and Function Notation Domain and Range
	3.3 Review	Rates of Change and Behavior of Graphs
9 10/7-10/9	Review **Test 2 (2.1, 2.4 – 2.7, 4.1, and 3.1 – 3.3)**	
	3.4	Composition of Functions
10 10/14-10/16	3.5	Transformation of Functions
	3.7	Inverse Functions

11 10/21-10/23	5.1	Quadratic Functions
	5.2-5.3	Power Functions and Polynomial Graphs Graphs of Polynomial Functions
12 10/28-10/30	5.4 Review	Dividing Polynomials
	Review **Test 3 (3.4 – 3.7 and 5.1 – 5.4)**	
13 11/4-11/6	5.5	Zeros of Polynomial Functions
	5.5 continue 6.1-6.2	Zeros of Polynomial Functions Exponential Functions Graphs of Exponential Functions
14 11/11-11/13	6.3-6.4	Logarithmic Functions Graphs of Logarithmic Functions
	6.5	Logarithmic Properties
15 11/18-11/20	6.6 Review	Exponential and Logarithmic Equations
	Review **Test 4 (5.5 and 6.1 – 6.6)**	
16 11/25-11/27	**Thanksgiving Break**	
17 12/2-12/4	11.1	Systems of Linear Equations: Two Variables
	Final Review	
18 12/9-12/11	**MW 9:30-10:45 class** **Final Wednesday 12/11** **8:00-10:00**	