

MATH 1111 - College Algebra  
Section 16  
Mon, Wed, Fri 1:25-2:15, 146 Boyd Lecture Hall

**Hours Credit:** 3 hours

**Prerequisites:** None

Math Department recommends a minimum ALEKS Placement score of 46 to be successful in the class.

**COURSE INSTRUCTOR**

**Instructor:** Scott Sykes

**Office:** 314 Boyd

**Email:** [ssykes@westga.edu](mailto:ssykes@westga.edu)

**Phone:** 678-839-4125

**OFFICE HOURS:** MON 10:00-12:00, 2:30-3:30

TUES 1:00-3:00

WED 10:00-12:00, 2:30-3:30

FRI 10:00-12:00

**REQUIRED COURSE MATERIALS**

**TEXT AND OTHER REQUIRED COURSE MATERIALS.**

TEXT: *College Algebra and Trigonometry*, by Julie Miller and Donna Gerken (McGraw Hill Education)

ALEKS: All students in MATH 1111 are required to have an ALEKS Account. Go to [www.aleks.com](http://www.aleks.com) to purchase an account. The course code for this section is **33QKK-DN3KK**

**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. An understanding of the equations of circles and lines
2. An understanding of functions and how to graph functions
3. An understanding of operations on functions including function composition
4. An understanding of polynomial graphs, including intercepts and end-behavior
5. An understanding of how to find the zeros of a polynomial and how to factor polynomials
6. An understanding of inverse functions and how to find them graphically and algebraically
7. An understanding of the properties of exponential and logarithmic equations
8. An understanding of how to solve exponential and logarithmic equations
9. An understanding of how to solve a system of equation

## COURSE SCHEDULE

WEEK	Sections	NOTE	Learning Outcome
1	1.1: Linear Equations and Rational Equations		
	1.2: Applications with Linear and Rational Equations		
2	1.3: Complex Numbers		
	1.4: Quadratic Equations		
	1.5: Application of Quadratic Equations		
3	1.6: More Equations and Applications		
	1.7: Linear, Compound and Absolute Value Inequalities		
4	<b>TEST 1</b>		
	2.1: The Rectangular Coordinate System and Graphing Utilities		
5	2.2: Circles		1
	2.3: Functions and Relations		2
6	2.4: Linear Equations in Two Variables and Linear Functions		1
	2.5: Applications of Linear Functions		1
	2.6: Transformations of Graphs		2
7	2.7: Analyzing Graphs of Functions and Piecewise Defined Functions	Even/Odd, Symmetry, Increasing/Decreasing only	2
	2.8: Algebra of Functions		3
8	<b>TEST 2</b>		
	3.1: Quadratic Functions and Applications		
9	3.2: Introduction to Polynomial Functions		4
	3.3: Division of Polynomials and Factor and Remainder Theorem		4
	3.4: Zeros of Polynomials		5
10	3.7: Variation		
	<b>TEST 3</b>		
11	4.1: Inverse Functions		6
	4.2: Exponential Functions		7
	4.3: Logarithmic Functions		7
12	4.4: Properties of Logarithms		7
	4.5: Exponential and Logarithmic Equations		8
13	4.6: Modeling with Exponential and Logarithmic Functions		
	<b>TEST 4</b>		
14	9.1: Systems of Linear Equations in Two Variables and Applications		9
	9.2: Systems of Linear Equations in Three Variables and Applications		9

## **IMPORTANT DATES:**

<b><u>Add/Drop Ends:</u></b>	Sunday, August 14th
<b><u>Last Day to Withdrawal with W:</u></b>	Friday, Sept 30 <sup>th</sup>
<b><u>Last Day of Class:</u></b>	Friday, December 2nd
<b><u>Final Exam Period:</u></b>	December 3-9 (see The Scoop for specific times)
<b><u>No classes:</u></b>	Monday, Sept 5 <sup>th</sup> (Labor Day) Thursday, Oct 6 <sup>th</sup> and Friday, Oct 7 <sup>th</sup> (Fall Break) November 21 <sup>st</sup> – 25 <sup>th</sup> (Thanksgiving)

## **COURSE ASSESSMENT**

There will be 4 in class tests given on:

- Friday September 2
- Friday, September 30
- Friday October 21
- Friday, November 18

In addition, there will be a final given on Wednesday, December 7<sup>th</sup> from 11:00-1:00. The final counts as two tests.

You will also have a module due on ALEKS every Friday starting August 19<sup>th</sup>. The module closes at 11:59 pm every Friday. Do not wait until the due date to do the module – if the site is not available, you will get a 0 for that module!

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.

At the end of the semester, you will have 7 grades: Test 1, Test 2, Test 3, Test 4, FINAL, FINAL, ALEKS. You can drop the lowest score and add the other 6 together. Your grade in the class is based on that total on the following chart:

### **Grading Scale:**

TOTAL	GRADE
540-600	A
480-539	B
420-479	C
360-419	D
0-359	F



## **OTHER COURSE INFORMATION**

**You are expected to attend class on a regular basis. Occasionally, in class, there may be extra points awarded for doing work.**

## **COURSE POLICIES AND INFORMATION**

### **University Policies**

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

[http://www.westga.edu/assetsDept/vpaa/Common\\_Language\\_for\\_Course\\_Syllabi.pdf](http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf)

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.

### **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. The following is also mandatory:

## IMPORTANT DATES:

Friday, August 19	Module 1 Due *
Friday, August 26	Module 2 Due *
Friday, September 2	Module 3 Due *
<b>Friday, September 2</b>	<b>TEST 1</b>
Friday, September 9	Module 4 Due *
Friday, September 16	Module 5 Due *
Friday, September 23	Module 6 Due *
Friday, September 30	Module 7 Due *
<b>Friday, September 30</b>	<b>TEST 2</b>
Friday, October 7	Module 8 Due *
Friday, October 14	Module 9 Due *
Friday, October 21	Module 10 Due *
<b>Friday, October 21</b>	<b>TEST 3</b>
Friday, October 28	Module 11 Due *
Friday, November 4	Module 12 Due *
Friday, November 11	Module 13 Due *
Friday, December 18	Module 14 Due *
<b>Friday, November 18</b>	<b>TEST 4</b>
Friday, December 2	Module 15 Due *
<b>Wednesday, December 7</b>	<b>FINAL</b>

\*Due dates for ALEKS Modules