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
**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
<table>
<thead>
<tr>
<th>WEEK</th>
<th>Sections</th>
<th>NOTE</th>
<th>Learning Outcome</th>
</tr>
</thead>
</table>
| 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    | **TEST 1**  
|      | 2.1: The Rectangular Coordinate System and Graphing Utilities |      |                  |
| 5    | 2.2: Circles  
|      | 2.3: Functions and Relations | 1 |                  |
| 6    | 2.4: Linear Equations in Two Variables and Linear Functions  
|      | 2.5: Applications of Linear Functions  
|      | 2.6: Transformations of Graphs | 1 |                  |
| 7    | 2.7: Analyzing Graphs of Functions and Piecewise Defined Functions  
|      | 2.8: Algebra of Functions | Even/Odd, Symmetry, Increasing/Decreasing only | 2 |      |
| 8    | **TEST 2**  
|      | 3.1: Quadratic Functions and Applications |      |                  |
| 9    | 3.2: Introduction to Polynomial Functions | 4 |                  |
| 10   | 3.3: Division of Polynomials and Factor and Remainder Theorem | 4 |                  |
| 11   | 3.4: Zeros of Polynomials  
|      | 3.7: Variation | 5 |                  |
| 12   | **TEST 3**  
|      | 4.1: Inverse Functions | 6 |                  |
| 13   | 4.2: Exponential Functions  
|      | 4.3: Logarithmic Functions | 7 |                  |
| 14   | 4.4: Properties of Logarithms  
|      | 4.5: Exponential and Logarithmic Equations | 7 |                  |
| 15   | 4.6: Modeling with Exponential and Logarithmic Functions  
|      | **TEST 4**  
|      | 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:

Add/Drop Ends: Sunday, August 14th
Last Day to Withdrawal with W: Friday, Sept 30th
Last Day of Class: Friday, December 2nd
Final Exam Period: December 3-9 (see The Scoop for specific times)

No classes: Monday, Sept 5th (Labor Day)
Thursday, Oct 6th and Friday, Oct 7th (Fall Break)
November 21st – 25th (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 7th from 11:00-1:00.
The final counts as two tests.

You will also have a module due on ALEKS every Friday starting August 19th. 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:

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>540-600</td>
<td>A</td>
</tr>
<tr>
<td>480-539</td>
<td>B</td>
</tr>
<tr>
<td>420-479</td>
<td>C</td>
</tr>
<tr>
<td>360-419</td>
<td>D</td>
</tr>
<tr>
<td>0-359</td>
<td>F</td>
</tr>
</tbody>
</table>
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

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

*Due dates for ALEKS Modules