MATH 1111 - College Algebra

**Hours Credit:** 3 hours  
**Prerequisites:** None

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

**Instructor:** James Storey  
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**Email:** jstorey@westga.edu  
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**OFFICE HOURS** 10:45 a.m.-noon

**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 G4XTN-EDMEP  
**Registration video:** [https://www.youtube.com/watch?v=yzqWxl5ijCc&feature=youtu.be](https://www.youtube.com/watch?v=yzqWxl5ijCc&feature=youtu.be)

**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>
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<tr>
<th>WEEK</th>
<th>Sections</th>
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| 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  8/31/16**  
2.1: The Rectangular Coordinate System and Graphing Utilities | | |
| 5    | 2.2: Circles  
2.3: Functions and Relations | 1 | 1 |
| 6    | 2.4: Linear Equations in Two Variables and Linear Functions  
2.5: Applications of Linear Functions  
2.6: Transformations of Graphs | 1 | 2 |
| 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  10/3/16**  
3.1: Quadratic Functions and Applications | | |
| 9    | 3.2: Introduction to Polynomial Functions  
3.3: Division of Polynomials and Factor and Remainder Theorem | 4 | 4 |
| 10   | 3.4: Zeros of Polynomials  
3.7: Variation | 5 | |
| 11   | **TEST 3  10/24/16**  
4.1: Inverse Functions | | |
| 12   | 4.2: Exponential Functions  
4.3: Logarithmic Functions | 7 | 7 |
| 13   | 4.4: Properties of Logarithms  
4.5: Exponential and Logarithmic Equations | 7 | 8 |
| 14   | 4.6: Modeling with Exponential and Logarithmic Functions | | |
| 15   | **TEST 4  11/17/16**  
9.1: Systems of Linear Equations in Two Variables and Applications  
9.2: Systems of Linear Equations in Three Variables and Applications | | |
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)

ASSESSMENT GRADING:

Four tests will be given. If all are taken the lowest test grade will be dropped. The homework grade from ALEKS will count as a test grade. This will give 4 major grades counting 75% of your grade. *The final exam will account for 25% of the grade.*

Test Policy: **NO make-up tests will be given. The lowest of the four scheduled tests grades will be dropped. If a test is missed it will be the one dropped. A second test should not be missed!**

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

Attendance: Regular attendance is required for success in this course. If you decide to stop attending class, be sure that you withdraw with the registrar’s office. **Starting with the 4th absence you may be dropped from the class depending on the nature of the absence. Proper documentation from a doctor, court, etc. must be provided.** Please be clear all absences must have proper documentation provided, even the first three (3). **Tardies: Please do not arrive late to class and/or leave early.** This is a major distraction. If it is excessive or a problem those late arrivals/early outs will be counted as absences. You may not be allowed in the class late.
Please do not go out and come back in during a class. If you need to leave because of an emergency, then take your things and do not return.

**University Policies and Academic Support**
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.

For important policy information, i.e., the UWG Honor Code, Email, and Credit Hour policies, as well as information on Academic Support and Online Courses, please review the information found in the Common Language for Course Syllabi documentation at http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf.

**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. The following is also mandatory:

**Cell Phones and Electronic Devices:** Cell phones and electronic devices should NOT be used in class and should not be out during class. Please do not go in and out of class to talk on the phone. This was a major problem and distraction one year. There should be NO side conversations in class! There should be NO visitors in class!