MATH 1111 - College Algebra  
**Hours Credit:** 3 hours  
**Prerequisites:** None

**COURSE INSTRUCTOR**  
**Instructor:** Wesley Gay  
**Office:** Boyd 111 B  
**Email:** wgay@westga.edu  
**Phone:** 678-839-3108

**OFFICE HOURS:** Friday 11:00 a.m. – 4:00 p.m.

A note on e-mails: Keep a check on your UWG e-mail. This is where I will most often send study guides, helps, homework assignment updates, announce test dates, or let you know if I will have additional office hours or have to cancel or move them for some reason.

When contacting me, make an effort to use correct English. Let me know what class you are in and lay out exactly what you would like help with or want to know.

**Example of a good e-mail:**

Mr. Gay,

My name is Ray Comfort and I am in your 11:00 to 12:15 class. I missed the first day of class and wanted to know if there was an assignment given that I should be working on or an announcement made that I need to know about?

Sincerely,
Ray Comfort

**Example of a bad e-mail:**

Sup, I need help This math mayke no since.

**REQUIRED COURSE MATERIALS**  
**TEXT:** *College Algebra and Trigonometry, Abramson, Openstax*. This text may be downloaded at no cost to you by going to: https://openstax.org/details/books/algebra-and-trigonometry

Students should go to “Download a PDF” and download the High Resolution version.

**HOMEWORK PLATFORM:** You need a “My Open Math” account this is also provided at no cost to you and can be set up by going to: www.myopenmath.com  
(You need to get this set up quickly. Your first assignment is due on the 16th at 11 p.m.)

**Course ID:**  
**Enrollment Key:**
Some suggestions:

- For your username use the format: LastName_FirstName_SomeNumber (Try different #'s if the one you chose is taken already) If you already have an account, then feel free to go ahead and use it.
- Example: Comfort_Ray_55
- Make sure you save you password somewhere safe in case you forget it
- Use your West Georgia E-mail when making this account

You will also need paper and pencils. You may use a calculator so long as it does not have a computer algebra system. So, the TI-89 is off limits as is any equivalent or superior calculator regardless of brand.

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 via tests, possible pop-quizzes, homework, in class discussion, and a comprehensive final exam.

ASSESSMENT GRADING:

Tests (60%)  I aim to give one week of advance notice for test.
Homework (15%) – My Open Math (MOM)
Final examination (25%)
Total (100%)
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:
89.5% \leq x \quad \text{A}
79.5% \leq x < 89.5% \quad \text{B}
69.5% \leq x < 79.5% \quad \text{C}
59.5% \leq x < 69.5% \quad \text{D}
x < 59.5% \quad \text{F}

OTHER COURSE INFORMATION

Attendance Policy: Attendance is encouraged, but not required. You are responsible for all information presented in any class that you miss. This includes but is not limited to the announcement of future test dates and material presented.

Make-up Policy
Test: I will not be giving any make-up exams. So, attendance is encouraged. However, you may take a test early if we can arrange a mutually agreeable time.

Bonus points and other helps:
“All of us are born of women, have few days, and are full of turmoil. Like a flower, we bloom, then wither, flee like a shadow, and don’t last.” Job 14:1-2 CEB

Life happens. At the worst time we are apt to have a flat tire, a dead battery, sickness, a sleepless night, etc. I understand this and thus will allow your final to replace your lowest test grade at the end of the semester. So, if you miss one test, then your grade on the final will replace that zero. This does not count for the homework. You know about those assignments days and weeks ahead of time and can get outside help to complete them.

Note: If you are caught cheating on any assignment you will forfeit any helps or bonus points that are given. This penalty may be applied retroactively to include previous assignments. This is in addition to other penalties that may be applied to cheating such as a zero on the assignment or for the entire course and referral to the office of community standards.

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
Definitions of academic dishonesty are defined in the student handbook:
www.westga.edu/handbook/
You are responsible for knowing these.

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.

### COURSE OUTLINE

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Exponents and Scientific Notation</td>
</tr>
<tr>
<td>1.3</td>
<td>Radicals and Rational Expressions</td>
</tr>
<tr>
<td>1.4</td>
<td>Polynomials</td>
</tr>
<tr>
<td>1.5</td>
<td>Factoring Polynomials</td>
</tr>
<tr>
<td>1.6</td>
<td>Rational Expressions</td>
</tr>
<tr>
<td>2.1</td>
<td>The Rectangular Coordinate System and Graphs</td>
</tr>
<tr>
<td>2.2</td>
<td>Linear Equations in One Variable</td>
</tr>
<tr>
<td>2.3</td>
<td>Models and Applications</td>
</tr>
<tr>
<td>2.4</td>
<td>Complex Numbers</td>
</tr>
<tr>
<td>2.5</td>
<td>Quadratic Equations</td>
</tr>
<tr>
<td>2.6</td>
<td>Other Types of Equations</td>
</tr>
<tr>
<td>2.7</td>
<td>Linear Inequalities and Absolute Value Inequalities</td>
</tr>
<tr>
<td>3.1</td>
<td>Functions and Function Notation</td>
</tr>
<tr>
<td>3.2</td>
<td>Domain and Range</td>
</tr>
<tr>
<td>3.3</td>
<td>Rates of Change and Behavior of Graphs</td>
</tr>
<tr>
<td>3.4</td>
<td>Composition of Functions</td>
</tr>
<tr>
<td>3.5</td>
<td>Transformation of Functions</td>
</tr>
<tr>
<td>3.7</td>
<td>Inverse Functions</td>
</tr>
<tr>
<td>4.1</td>
<td>Linear Functions</td>
</tr>
<tr>
<td>4.2</td>
<td>Modeling with Linear Functions</td>
</tr>
<tr>
<td>5.1</td>
<td>Quadratic Functions</td>
</tr>
<tr>
<td>5.2</td>
<td>Power Functions and Polynomial Graphs</td>
</tr>
<tr>
<td>5.3</td>
<td>Graphs of Polynomial Functions</td>
</tr>
<tr>
<td>5.4</td>
<td>Dividing Polynomials</td>
</tr>
<tr>
<td>5.5</td>
<td>Zeros of Polynomial Functions</td>
</tr>
<tr>
<td>6.1</td>
<td>Exponential Functions</td>
</tr>
<tr>
<td>6.2</td>
<td>Graphs of Exponential Functions</td>
</tr>
<tr>
<td>6.3</td>
<td>Logarithmic Functions</td>
</tr>
<tr>
<td>6.4</td>
<td>Graphs of Logarithmic Functions</td>
</tr>
<tr>
<td>6.5</td>
<td>Logarithmic Properties</td>
</tr>
<tr>
<td>6.6</td>
<td>Exponential and Logarithmic Equations</td>
</tr>
<tr>
<td>6.7</td>
<td>Exponential and Logarithmic Models</td>
</tr>
<tr>
<td>11.1</td>
<td>Systems of Linear Equations: Two Variables</td>
</tr>
<tr>
<td>11.2</td>
<td>Systems of Linear Equations: Three Variables</td>
</tr>
</tbody>
</table>

**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)