Math 1111 – College Algebra – 3 Credit Hrs
Section 01; Fall 2019
Tu, Th 8:00-9:15 pm; Boyd 303

Instructor: Mr. Ricky Johnson
Office: 106D Boyd Bldg., 1st Floor
E-mail: rjohnson@westga.edu
Office Hours: Tu/Th 11:00-12:15; Tu/Th 3:30-4:45, or by appt

Course 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.

Text: College Algebra and Trigonometry, Abramson, Openstax. Student can download for free at [https://openstax.org/details/books/algebra-and-trigonometry](https://openstax.org/details/books/algebra-and-trigonometry). Students should go to “Download a PDF” and download the High Resolution version.

CourseDen: I will be using courseDen to post announcements, grades, and solutions to tests. Please do not use courseDen to email me, use rjohnson@westga.edu instead. In addition, I have helpful videos and practice problems (not to be turned in).

MyOpenMath: All students are required to create an account at [www.myopenmath.com](http://www.myopenmath.com). It costs nothing. When registering, use the course ID: 51935 and enrollment key: rej12019. Your total MyOpenMath score is comprised of homework (50%), quizzes (50%). All assignments due at midnight on the specified due dates. There are bonus problems for bonus points as well.

Calculator: A graphing calculator equivalent to the TI-83, 84, 85, and 86 is recommended for tests and homework. Cell phone calculators, the TI-89 and other equivalent calculators will not be permitted during tests.

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.

MyOpenMath Homework: Usually due at midnight on Fridays (this may vary). 3 attempts for each problem. By clicking “Try another similar problem” your 3 attempts
start over. After the due dates, scores cannot be changed, but you can still work the problems for practice. Note, many of the problems have a video link if you need extra help. The lowest 4 homework scores will be dropped. **Note, the first assignment is the “Intro to MyOpenMath” assignment due by Tuesday, August 20.**

**MyOpenMath Quizzes:** Usually due by midnight 1 day after the homework assignments. 2 attempts per problem (30% penalty after 1st attempt). Note, once a quiz is started you will have a limited amount of time to complete it – usually about 3 hours. The lowest 2 quiz scores will be dropped. If you log out, the timer keeps going. The quizzes become available 3 days before they are due. **Note, the first quiz is the “Syllabus Quiz” due by Tuesday, August 20.**

**MyOpenMath Bonus Problems:** These are due the same day as the quiz. 1 bonus point per problem. Only 1 attempt per problem.

**MyOpenMath LatePasses:** No extensions will be granted for any reason on any assignment in MyOpenMath. However, you will be granted 6 LatePasses that can be used to extend the due date of a homework or a quiz (but not for bonus problems) by 72 hours (3 days). You may only use 1 LatePass per homework (or quiz). After 72 hours past the due date, a LatePass cannot be used. **Note, if you attempt to access the assignment or quiz after the due date before applying the LatePass, the LatePass will not work. Apply the LatePass first, THEN access the assignment or quiz!**

**Tests:** 4 in-class tests. **NO make-up tests will be scheduled for any reason.** However, you may drop your lowest test score and replace it with your average MyOpenMath quiz score. After that, you may also have your lowest test score replaced with the score you receive on the final exam if higher (this includes a missed test).

**Final Exam:** Tuesday, Dec. 10, 8:00-10:00 am. The Final Exam is cumulative and mandatory. It cannot be rescheduled or made-up for ANY reason.

**Bonus Points:** You will be able to earn approximately 350 bonus points throughout the semester. The bonus points will be worth 4% added to your overall test average. There are 4 ways to earn bonus points:

1. Up to 30 points may be earned by going to the **Math Tutoring Center** (Boyd–room 205). You need to swipe your UWG ID card when entering and leaving. You will receive 2 bonus points for every day you visited the MTC (you must have stayed for at least 30 minutes) and received help from a tutor. You must turn in a completed verification form to me by Thursday, Dec 5, 2019 (form is on courseDen). No appt is necessary.
2. Up to 30 points may be earned by attending tutoring sessions at **The Center for Academic Success** (Room 200 of the University Community Center). You will receive 3 bonus points for each session. Must turn in the green verification card they give you to me.
3. **In-class Bonus Quizzes.** Bonus points will vary.
4. **Bonus Problems on MyOpenMath.** 1 bonus point per problem.
Example: The student’s test average from all 4 in-class tests is 89. Student earns 175 bonus points out of a maximum of 350 bonus points. Therefore, since \((175/350) \times 4 = 2\), student earns a 2% bonus. Student’s test average is now 91.

In-class Bonus Quizzes: Usually they will be unannounced (pop quizzes) and consist of 1 or 2 problems for which you will have maybe 5 minutes or so to work on them. Most of the time they’ll be over topics we cover the same day in class. Therefore, reading ahead and coming to class prepared is recommended.

Grading Policy: Final grade will be based on the following scale: (A=90-100%, B=80-<90%, C=70-<80%, D=60-<70%, F=<60).

| 4 Tests (tentative dates, subject to change) | 60% (includes 4% bonus) |
| Test 1 Thursday, September 5 | |
| Test 2 Tuesday, October 1 | |
| Test 3 Thursday, October 31 | |
| Test 4 Tuesday, December 3 | |
| MyOpenMath Total score | 15% |
| Final (Comprehensive) Tues, Dec. 10, 8-10:00 am | 25% |
| Total | 100% |

Attendance: If you miss a class, you are still responsible for all material you may have missed. Refer to courseDen for any announcements. **There will be NO make-ups scheduled for missing a test, a bonus quiz, or the Final Exam.** If you miss a test, you may use one of the 2 options as previously discussed to replace the score.

Disabilities: If you have a documented disability (via UWG’s Accessibility Services) you’ll be given all reasonable accommodations, need to send me the SAR report. Adjustments needed in relation to test-taking must be brought to the instructor's attention well in advance of the test (at least **one week** prior).

Other Course Policies:
1. Cell phones should be set to an inaudible setting or turned off.
2. All electronic correspondence between student and instructor should be by way of your UWG email account – otherwise I will not respond.
3. Arriving late and leaving early is discouraged as it is distracting and disrespectful.
4. Additional course policies:
   http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi .pdf

IMPORTANT DATES:
First Day of Class: Thursday, August 15
Drop Ends: Tuesday, August 20
Last Day to Withdraw with W: Wednesday, October 9
Last Day of Class: Thursday, December 5
Final Exam: Tuesday, Dec. 10, 8:00-10:00 am
No classes: Monday, September 2 (Labor Day)
   Thursday, October 3 – Friday, October 4 (Fall Break)
   Mon, November 25 – Fri, November 29 (Thanksgiving Break)
<table>
<thead>
<tr>
<th>Week</th>
<th>Week beginning Mon:</th>
<th>Sections (from the textbook) to be covered during the week:</th>
</tr>
</thead>
</table>
| 1    | 8/12/2018         | Introduction  
                          1.2: Exponents                                           |
| 2    | 8/19/2018         | 1.3: Radicals  
                          1.4: Polynomials  
                          1.5: Factoring Polynomials  
                          1.6: Rational Expressions                              |
| 3    | 8/26/2018         | 2.1: The Rectangular Coordinate System and Graphs  
                          2.2: Linear Equations in One Variable  
                          2.3: Models and Applications                           |
| 4    | 9/2/2018          | 2.4: Complex Numbers  
                          **Test 1 --- Thursday, 9/5/2018**                      |
| 5    | 9/9/2018          | 2.5: Quadratic Equations  
                          2.6: Other Types of Equations                          |
| 6    | 9/16/2018         | 2.7: Linear Inequalities and Absolute Value Inequalities  
                          3.1: Functions and Function Notation  
                          3.2: Domain and Range                                   |
| 7    | 9/23/2018         | 3.3: Rates of Change and Behavior of Graphs  
                          3.4: Composition of Functions  
                          3.5: Transformation of Functions                        |
| 8    | 9/30/2018         | **Test 2 --- Tuesday, 10/1/2018**  
                          **FALL BREAK NO CLASSES 10/3 – 10/4**               |
| 9    | 10/7/2018         | 3.5: Transformation of Functions  
                          3.7: Inverse Functions  
                          4.1: Linear Functions                                   |
| 10   | 10/14/2018        | 2.2: Linear Equations in One Variable  
                          4.2: Modeling with Linear Functions  
                          5.1: Quadratic Functions                                |
| 11   | 10/21/2018        | 5.2: Power Functions and Polynomial Graphs  
                          5.3: Graphs of Polynomial Functions  
                          5.4: Dividing Polynomials  
                          5.5: Zeros of Polynomial Functions                       |
| 12   | 10/28/2018        | 5.5: Zeros of Polynomial Functions  
                          **Test 3 --- Thursday, 10/31/2018**                   |
| 13   | 11/4/2018         | 6.1: Exponential Functions  
                          6.2: Graphs of Exponential Function  
                          6.3: Logarithmic Functions  
                          6.4: Graphs of Logarithmic Functions                    |
| 14   | 11/11/2018        | 6.5: Logarithmic Properties  
                          6.6: Exponential and Logarithmic Equations  
                          6.7: Exponential and Logarithmic Models                 |
| 15   | 11/18/2018        | 11.1: Systems of Linear Equations: Two Variables  
                          11.2: Systems of Linear Equations: Three Variables      |
| 17   | 12/2/2018         | **Test 4 --- Tuesday, 12/3/2018**  
                          Review for the Final Exam                             |

**Final Exam — Tuesday, Dec 10, 8:00-10:00 am (covers All sections)**