MATH 1111 - College Algebra

UWG Fall 2019

TTh 11:00 am - 12:15 pm in Boyd #302

Hours Credit: 3 hours
Prerequisites: None

Note: This course satisfies Area A2 of the Core Curriculum.

COURSE INSTRUCTOR
Instructor: Irina Pashchenko
Office: Library #311
Email: ipashche@westga.edu

OFFICE HOURS: MW 9:45 am-11:30 am, TTh 9:45 am-10:30 am in the Library #311

REQUIRED COURSE MATERIALS
TEXT: *College Algebra and Trigonometry, Abramson, Openstax.* Student can download free at https://openstax.org/details/books/algebra-and-trigonometry.

Students should go to "Download a PDF" and download the High Resolution version.
You are required to have a MyOpenMath online account for your homework assignments. The instruction for creating an account is given on the last page.

NOTE: Only calculators provided by your instructor will be allowed for your tests and final exam. Usage of any other calculators is allowed during regular lectures only.

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
Upon successful completion of this course, students will demonstrate the ability to:
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 using the following methods:

Homework
All homework assignments will be completed online through the MyOpenMath website. Be sure to understand all problems and be able to show all steps in the solutions if they are required. The Course ID is printed in the MyOpenMath instruction that is included at the end of the syllabus. Each homework assignment is due on the corresponding chapter exam day and will not be available afterward. After a particular assignment's deadline has passed, I will NOT participate in any discussion (in person, or email) about the deadline.

Tests
There will be three in-class tests. All tests will be taken during the regular class time in the regular classroom. Books and notes will not be allowed on any tests. Each student may use one two-sided handwritten by himself (herself) page of notes for the tests. Missed tests will receive a grade of 0. THERE WILL BE NO MAKE UPS. The lowest test grade will be dropped. We will have a review session before each test. In addition, each practice test will be posted in your CourseDen accounts. One regular narrow green scantron form will be required for each test and the final exam. On test and exam days, students will be dismissed according to the schedule written on the board. Additional rules will be applied.

Final Exam
There will be a comprehensive final exam at the end of the semester given in the regular classroom. The exam will be given on **Tuesday, Dec. 10 at 11:00 am - 1:00 pm.**

Class Participation
Each student will be credited with 25 participation points at the beginning of the semester, one for each class lecture. Two equally important parts will allow a student to keep his (her) point per class lecture.

Regardless of your ability to understand the material, you are expected to be present for each class meeting. You are allowed to have no more than three unexcused absences for the course. After that, you will lose one point per each unexcused absence. An absence is considered to be excused if you had a serious reason for missing a class like admission to a hospital or a death in your family. An official document explaining your absence needs to be emailed to me.
Moreover, regardless of how well you understand the material, you are expected to pay attention to every lesson presented by your teacher. Should you expect any important phone call, keep your phone on vibration. Then, step outside to receive your call if necessary.
There is a group of prohibited activities in class, which includes, but is not limited to receiving any phone calls or text messages, initiating phone calls or text messages, touching any electronic devises with your hands, keeping headphones or other electronic devises visible on any parts of your body or clothes, even if you believe that they are turned off. Once any of the prohibited activities occur, the student loses a participation point for that day. If a student who lost his (her) participation point continues behaving the same way during the same class, the student will be asked to leave.
Taking notes in class is recommended, but not mandatory. In order to keep a participation point for each lesson, a student is just expected to be in class and avoid using electronic devises.

ASSESSMENT GRADING:

MyOpenMath Homework	25%
Tests	45%
Final Exam	25%
Class Participation	5%

Grading Scale:

90% - 100%:	A
80% - 89%:	B
70% - 79%:	C
60% - 69%:	D
<60%:	F

NOTE: No extra-credit assignments of any kinds will be offered during the course.

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:

- Respect the rights, interests, and values of others
- Respect the professionalism of the instructor
- No talking to each other when the instructor is lecturing
- No packing your possessions before the lecture is over
- No walking in the classroom (unless you need to use a restroom)
- No sleeping or putting your head on your desk
- Watch your language
- Turn off ALL your electronic devices. This includes cell phones, CD players, etc.

Conduct that disrupts the classroom environment will not be tolerated.

OTHER COURSE INFORMATION

It is the student's responsibility to catch-up on any missed material. It is your responsibility to get notes from your classmates.

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

Any form of academic dishonesty will result in a failing grade for the assignment for the first offense (students will not be able to replace this grade). A second offense will result in a failing grade for the course. All forms of academic dishonesty will be reported and the student notified. Academic dishonesty is defined as a student's use of unauthorized assistance with intent to deceive an instructor or other such person who may be assigned to evaluate the student's work in meeting course and degree requirements.
Definitions of academic dishonesty are also 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.

Math Tutoring Center

Located in Boyd 205, MTC has a number of computers and some math tutors who can help you in studying math courses.

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)

COURSE OUTLINE

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

Class Schedule:

1	08/15/19	INTRO
2	08/20/19	1.2/1.3
3	08/22/19	1.4/1.5
4	08/27/19	1.6
5	08/29/19	2.1/2.2
6	09/03/19	2.3/2.4
7	09/05/19	2.5/2.6
8	09/10/19	2.7
9	09/12/19	Review
10	09/17/19	TEST 1
11	09/19/19	3.1/3.2
12	09/24/19	3.3/3.4
13	09/26/19	3.5
14	10/01/19	3.7
15	10/08/19	4.1
16	10/10/19	Review
17	10/15/19	TEST2
18	10/17/19	5.1/5.2
19	10/22/19	5.3
20	10/24/19	5.4
21	10/29/19	5.5
22	10/31/19	6.1/6.2
23	11/05/19	6.3/6.4
24	11/07/19	6.5
25	11/12/19	6.6
26	11/14/19	11.1
27	11/19/19	Review
28	11/21/19	TEST3
29	12/03/19	Review
30	12/05/19	Review
31	**12/10/19**	**Final Exam 11:00 am - 1:00 pm.**

How to register MyOpenMath

https://www.myopenmath.com/forms.php?action=newuser

Fill out the form. If you have any questions, please email me.

For your course, you do the following: