Course: MATH 1111 College Algebra, Section 01  3 credits  PREREQUISITE: NONE.

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. Credit for this course is not allowed if the student already has credit for a higher-numbered mathematics course.

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.

Instructor: Mr. Jim Bellon  (best way to contact me is through CourseDen)

Office & Hours: Boyd 104C  Mon & Wed 10-11am, 1:50–3:20pm,  other hours by appointment

Class Meets: Mon/Wed 11am – 12:15pm in Boyd 306 for face-face class time
In UWG’s CourseDen for class information and communication

Course Materials: A graphing calculator is recommended (preferably one of the TI-83 or 84 models).

TEXT:  College Algebra and Trigonometry, Abramson, Openstax PDF. Textbook is posted on courseden, you can view it and download.

Grading: Online Homework (avg counts 35%), 3 multiple choice tests in class (avg counts 40%)
Final exam (cumulative multiple-choice, counts 25%). Final grades determined as follows:
Fractional grades will be rounded up to next whole percent.

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\begin{array}{ccc}
90 \% \text{ and higher} & = & A \\
80 \% \text{ to } 89 \% & = & B \\
70 \% \text{ to } 79 \% & = & C \\
60 \% \text{ to } 69 \% & = & D \\
\text{Below } 60 \% & = & F \\
\end{array}
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Make-up policy: There are no make-ups for online assignments. You are expected to keep up with learning the material each week, completing assignments by the due dates, and getting help when needed. Make-ups for tests may be granted with a valid documented excuse, and only if you notify me before or on the day of the test.

Extra-credit policy: There will be NO extra credit given, period! Points can be earned only as stated above.

Last Date to Withdraw: Wed February 27th  Any student who withdraws after this date will receive a grade of “F”.
**Attendance Policy:** Students are expected to pay attention to CourseDen calendar and check for assignments online. Failure to do so will result in missing assignments and maybe being dropped. Grades will not be altered for attendance. HOWEVER, students are expected to attend class and complete all work when assigned. Students are responsible for the topics covered and assignments due whether present or not. “I was not here” is NOT a valid excuse.

**University Policies:** Please carefully review the following Common Language for all university courses at the link: 
https://www.westga.edu/administration/vpaa/assets/docs/facultyresources/common_language_for_course_syllabi_v2.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. You should also be familiar with the information in the student handbook: www.westga.edu/handbook/

**Class Rules:** You are to turn off your cellular phone during the class. You are not allowed to use your phone as a calculator. Please respect your instructor and other students in the class. No talking or any distracting behavior. If you fall asleep in class, you will be asked to leave. It is expected that students be familiar with the Student Conduct Code, Disciplinary Procedures and Disciplinary Sanctions in the Student Handbook. Cheating and/or any conduct that disturbs the classroom, the instructor, or the students WILL NOT be tolerated!! Any serious violations will be reported; appropriate actions will be taken; and consequences will result.

**Meeting with:**

**Instructor** can be beneficial and is encouraged. Meeting should occur during the instructor's office hours, whenever possible. If these hours conflict with a student's schedule, then appointments should be made. The meeting time is not to be used for duplication of lectures that were missed; it is the student's responsibility to obtain and review lecture notes before consulting with the instructor. As your instructor, I am very concerned about the student's achievement and well-being and encourages anyone having difficulties with the course to contact me for extra help.

**Course Accessibility:** If you are a student who 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 instructor or UWG Accessibility Services for more information.

**Math Tutoring:** On Campus: **Offered by the math Department in Boyd 205, you can just walk in and get help. Hours are Mon/Tues/Wed/Thurs 9am-7pm, Fri 9am-3pm There are 2-3 tutors on duty who will rotate between students. There are also textbooks and computers to use while you are in the tutoring center.

**Offered by the Center for Academic Success in UCC building. You will be assigned a 1-1 personal tutor, or attend available drop in sessions.**
This is a tentative schedule of assignments and topics to be covered in class sessions. Changes will be made as needed. Once we finish a section, we will immediately move along to the next section. It is recommended that you read over text sections BEFORE we cover them in class. After we cover topics, you should complete assignments and do any extra practice or get help as needed. Don’t wait until its too late (like after doing bad on a test).

Jan 7 – 9
Introduction, Sec 1.2 Exponents/Scientific Notation, 1.3 Radicals and Rational Exponents

Jan 14 – 16
Sec 1.4 Polynomials, 1.5 Factoring Polynomials, 1.6 Rational Expressions,

Jan 21 – 23
**Monday 1/21 MLK DAY - No Class**
Sec 2.1 The Coordinate System and Graphs, 2.2 Linear Equations in One Variable, 2.3 Linear Models and Applications

Jan 28 – 30
Sec 2.4 Complex Numbers, 2.5 Quadratic Equations, 2.6 Other Types of Equations

Feb 4 – 6
Sec 2.7 Linear and Absolute Value Inequalities  **Review for test #1**
**Test #1 on Wednesday February 6th (Chapters 1 and 2)**

Feb 11 – 13
Sec 3.1 Functions and Function Notation, 3.2 Domain and Range
3.3 Rates of Change and Behavior of Graphs,

Feb 18 – 20
Sec 3.4 Composition of Functions, 3.5 Transformation of Functions, 3.7 Inverse Functions

Feb 25 – 27
Sec 4.1 Linear Functions, 4.2 Modeling with Linear Functions,
11.1 Systems of Linear Equations in Two Variables

Mar 4 – 6
**Review for test # 2, Test #2 on Wednesday March 6th (Chapters 3, 4, sec 11.1)**

Mar 11 – 13
Sec 5.1 Quadratic Functions, 5.2 Power Functions and Polynomial Graphs,
5.3 Polynomial Functions

MARCH 18 – 22
**SPRING BREAK**

Mar 25 – 27
Sec 5.4 Dividing Polynomials, 5.5 Zeros of Polynomials,

Apr 1 – 3
Sec 6.1 Exponential Functions, 6.2 Graphs of Exponential Functions
6.3 Logarithmic Functions

Apr 8 – 10
Sec 6.4 Graphs of Log Functions, 6.5 Log Properties, 6.6 Exp/Log Equations

Apr 15 – 17
Sec 6.7 Exp/Log Models  **Review for test # 3**

Apr 22 – 24
**Test #3 on Monday April 22nd (Chapters 5 and 6)**
Begin Final Review

Apr 29
**FINAL REVIEW**

**Monday May 6th**
**FINAL EXAM (all chapters) 11am – 1pm in our classroom.**

This is a common final 40 questions multiple choice given by the math department.