

MATH 096C Web: Intermediate Algebra
Spring 2015
Assistant Professor, Mrs. Jennifer
Howard

Contact Information:

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Blackboard (IT Helpdesk): 270-745-7000

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Office Location: South Campus, C211

Office Hours: Please email me to make an appointment.

Course Description

The fundamental skills of algebra and graphing are among the topics covered. This course is usually chosen by students who need algebra but do not have the prerequisites for Math 116. Students planning to enroll subsequently in Math 116 must earn a C or better in Math 096.

As young scholars, we will initially approach this course from an elementary level. However, by the end of the semester, you will be able:

- To feel more confident in your ability to work with math concepts by learning math study skills and learning to think with precision and logic.
- To describe how two variables relate to each other and be able to create and interpret graphs in your academic and professional career. (Graphing)
- To identify and translate a real world problem into a formula to help you make better decisions and save you money. (Linear equations and inequalities)
- To apply your problem solving skills and your metacognitive ability to work with abstract concepts. (imaginary numbers)
- To apply study skills to numerical course content, specifically learning College Algebra.

Course Policies

Note about Email:

Please send proper emails. Make sure to put "MATH 096 WEB" or "Intermediate Algebra WEB" in the subject line and to include your full name in the text. Also, use proper capitalization, spelling, and punctuation. Emails should come from a wku.edu address (emails from other accounts will not be opened). Students are welcome to schedule an appointment to meet with me face to face, but email is the quickest and preferred way of contacting me.

Respect:

Every student is to show respect for me and their classmates at all times. Everyone is entitled to ask as many questions as necessary to understand the material. There are no stupid or silly questions. The discussion board questions on Blackboard may spark some controversy. You are entitled to your opinion and to disagree with each other but please do so in a professional, respectful manner. Remember to always use course material or supplementary material to support your opinions.

The Learning Center (TLC):

Should you require academic assistance with your WKU courses, [The Learning Center](#) (located in the Downing University Center, A330) provides free supplemental education programs for all currently enrolled WKU students. TLC @ DUC offers certified, one-on-one tutoring in over 200 subjects and eight academic skill areas by appointment or walk in. Online tutoring is offered to distance learners. TLC is also a quiet study area (with side rooms designated for peer-to-peer tutoring) and offers a thirty-two machine Dell computer lab to complete academic coursework. Additionally, TLC has three satellite locations. Each satellite location is a quiet study center and is equipped with a small computer lab. These

satellite locations are located in Douglas Keen Hall, McCormack Hall, and Pearce Ford Tower. Please call TLC @ DUC at (270) 745-6254 for more information or to schedule a tutoring appointment.
www.wku.edu/tlc

Policy on Academic Dishonesty:

The academic dishonesty policy prohibits cheating, fabrication, facilitating academic dishonesty, and plagiarism. A software program will be used to identify plagiarism through a comparison of comprehensive databases of source material. I take academic dishonesty VERY, VERY seriously. Students who violate this policy will automatically receive a failing grade for the course and will be reported to their academic dean for disciplinary action.

From the Office for Student Disability Services:

In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in DUCA-200 of the Student Success Center in Downing University Center. Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

Quantitative Reasoning:

Apply an appropriate mathematical model to the problem to be solved.

Required Materials

[MyMathLab](http://www.mymathlab.com) is a computer program that is required for this course, available for purchase at the WKU Bookstore or Online at www.MyMathLab.com

The textbook is optional: Martin-Gay: Intermediate Algebra, 6e

A calculator is not required for this course. If you decide to get a calculator, keep in mind that you will probably be able to use a TI-83 or TI-84 in Math 116. Note: TI-89s, TI-92s and cell phone calculators are prohibited.

Because this is an online course, you will need your own computer with reliable internet access.

Course Requirements

Homework (25%)

Homework will be assigned daily. If you want to succeed in this class, it is vital that you do your homework. You learn mathematics by **practicing** mathematics. MyMathLab is the online homework program you will be required to purchase at the bookstore or online at www.mymathlab.com. It is crucial that you purchase this and get registered right away, because this is where all of the math material is located; videos, homework, quizzes, etc. Keep in mind that you have the ability to attain a 100% on all homework, because you can click "Similar Exercise" on each question before the due date. MyMathLab assignments will have strict deadlines. After the deadline has passed, the problems will be available only to review, not to improve your score.

Quizzes (25%)

Quizzes will be given in MyMathLab. There will be strict deadlines for each quiz.

Midterm and Final Exam (25% each)

The class will consist of a midterm and final exam that will be taken in a proctored setting. Please contact the DELO testing center to find the closest testing center in your area by Phone: (270) 745-5122 or Toll Free: 1-800-544-2280. You can also email them at dltesting@wku.edu. Scheduling must be done in advance. If you will be taking the exam at WKU, then click [DELO](http://www.wku.edu/testing/topnet-exam.php) to schedule the tests directly online (located at <http://www.wku.edu/testing/topnet-exam.php>).

Exams will need to be completed by a certain time (as per the schedule). To avoid any issues (illness, technological, family emergencies), please complete the exams as early as you feel comfortable doing so once they become available. Students who know that they will miss an exam will be required to contact

me **before** the scheduled exam date via email. A make-up exam will ONLY be given if permission has been granted PRIOR to exam time. You must schedule a make-up exam as soon as possible, and be aware that your exam will be different from that of the other students. Depending on the circumstances, and at my discretion, an additional assignment may be required for students who miss an exam.

Weight of the Course Requirements:

Homework	25%
Quizzes	25%
Midterm Exam	25%
Final Exam	25%
Total	100%

Note: The Gradebook is located in MyMathLab, where you can view your updated Overall Grade.

Final grades will be assigned as follows:

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

In accordance with the Academic Support Math Division, upon successful completion of this course (earning a grade of C or better) you will be able to do the following:

- Graph a linear equation in two variables.
- Factor trinomials.
- Factor using the sum or difference of two cubes.
- Solve an absolute value equation.
- Solve a quadratic equation.
- Write the equation of a line in slope intercept form.
- Evaluate a function for a specified value.
- Write a radical in simplest radical form.
- Add or subtract rational expressions.
- Multiply two complex numbers.

Day 1: Getting Started (January 28)

First, do this by Wednesday, January 28th at NOON!

- Login to Blackboard:
 - Read the Instructor Info and Syllabus.
 - Complete the Syllabus Quiz and the Welcome Blog. You must **earn a 100%** on the syllabus quiz in order to view the assignments.
 - Click on the Assignments folder, and PRINT the Schedule of Assignments
 - Click on the Assignments folder, and PRINT the Video Notebook (Chapters 1 to 9)
 - Click on the Assignments folder, click on Module 1 folder, and watch the 1.2 video while taking notes with your video notebook.
 - ****Click on the MyMathLab folder, and create an account.**
 - In MyMathLab, click on Homework tab, complete the 1.2 homework.

**** ALERT: IN ORDER TO LOGIN TO MYMATHLAB, YOU MUST FIRST GO THROUGH BLACKBOARD, THEN CLICK ON MYMATHLAB FOLDER TO CREATE AN ACCOUNT. YOU WILL NOT NEED A COURSE ID BECAUSE YOU ARE GOING DIRECTLY THROUGH BLACKBOARD.**

In this course, you will be using two programs: Blackboard and MyMathLab. Blackboard will be used to print the video notebook and watch videos. MyMathLab will be used to complete all math assignments and view your current grade.

COURSE MATERIAL OUTLINE

The following course material is subject to change at the discretion of the instructor.

Chapter 1: REAL NUMBERS AND ALGEBRAIC EXPRESSIONS

- 1.2 Algebraic Expressions and Sets of Numbers
- 1.3 Operations on Real Numbers and Order of Operations
- 1.4 Properties of Real Numbers and Algebraic Expressions

Chapter 2: EQUATIONS, INEQUALITIES, AND PROBLEM SOLVING

- 2.1 Linear Equations in One Variable
- 2.4 Linear Inequalities
- 2.6 Absolute Value Equations
- 2.7 Absolute Value Inequalities

Chapter 3: GRAPHS AND FUNCTIONS

- 3.1 Graphing Equations
- 3.2 Introduction to Functions
- 3.3 Graphing Linear Functions
- 3.4 The Slope of a Line
- 3.5 Equations of Lines

Chapter 4: SYSTEMS OF EQUATIONS

- 4.1 Solving Systems of Linear Equations in Two Variables
- 4.3 Systems of Linear Equations and Problem Solving

Chapter 5: EXPONENTS, POLYNOMIALS, AND POLYNOMIAL FUNCTIONS

- 5.1 Exponents and Scientific Notation
- 5.2 More Work with Exponents and Scientific Notation
- 5.3 Polynomials and Polynomial Functions
- 5.4 Multiplying Polynomials
- 5.5 The Greatest Common Factor and Factoring by Grouping
- 5.6 Factoring Trinomials
- 5.7 Factoring by Special Products
- 5.8 Solving Equations by Factoring and Problem Solving

Chapter 6: RATIONAL EXPRESSIONS

- 6.1 Rational Functions and Multiplying and Dividing Rational Expressions
- 6.2 Adding and Subtracting Rational Expressions
- 6.3 Simplifying Complex Fractions
- 6.4 Dividing Polynomials: Long Division and Synthetic Division
- 6.5 Solving Equations Containing Rational Expressions

Chapter 7: RATIONAL EXPONENTS, RADICALS, AND COMPLEX NUMBERS

- 7.1 Radicals and Radical Functions
- 7.2 Rational Exponents
- 7.3 Simplifying Radical Expressions
- 7.4 Adding, Subtracting, and Multiplying Radical Expressions
- 7.5 Rationalizing Denominators and Numerators of Radical Expressions
- 7.6 Radical Equations and Problem Solving
- 7.7 Complex Numbers

Chapter 8: QUADRATIC EQUATIONS AND FUNCTIONS

- 8.1 Solving Quadratic Equations by Completing the Square
- 8.2 Solving Quadratic Equations by the Quadratic Formula

Chapter 9: ALGEBRA OF FUNCTIONS

9.1 The Algebra of Functions