MATH 096 Intermediate Algebra Summer 2015

Instructor: Mrs. M. Jackson ***Office:*** C201 ***Phone:*** 780-2538 (my office)

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***Course Description*:** The fundamental skills of algebra, functions, and graphing are among the topics covered. This course is not applicable for baccalaureate or associate degree credit. Students planning to enroll subsequently in MA 116C or MATH 116 must earn a grade of "C" or better in DMA 096C.

Optional Text: Intermediate Algebra, 11th ed. by Lial, Hornsby, & McGinnis

***Required Technology*:** MathXL Student Access Code **Course ID:** **XL1W-K1WS-601Z-18L2**
Online access to the textbook is included with the code.

Supplies: binder, paper, pencil, scientific calculator

Calculators: A calculator is not required for this course. However, should you decide to use a calculator, you should keep in mind that the TI-83 or TI-84 is recommended for MATH 116. You may not use the TI-89 in this course or MATH 116, nor may you use a cell phone calculator. Furthermore, any calculator is prohibited until after the unit 1 test.

***Attendance*:** Regular attendance in this course is mandatory. You are expected to attend class and participate each day. If a student misses more than three (3) classes **(for any reason)**, he or she must either withdraw from the course or accept a failing grade for the semester.

Homework: Practicing new concepts outside of class is vital to your long-term understanding of the material. Therefore, homework problems will be assigned and completed daily on the computer using MathXL. **You must have access to a computer with online capabilities.** In order to master the material in the homework stage, you are expected to work on each assignment until a grade of 100% is attained. Each homework assignment will be graded on the computer and will be assigned with a deadline. After the deadline passes, problems will be available to you for review only, not to improve your homework score. As you do your homework, you will need to work out the problems in an organized manner in a spiral notebook designated for **math homework only.** Non-computer homework may also be assigned.

Cell Phones: Cell phones are not to be used during class. This means no phone calls, no texting, no games, etc. Your phone should be set on silent and you may not use it as a calculator at any time. If you have questions or concerns about this policy, please see me.

Make-up Exams: NO MAKE-UP EXAMS WILL BE GIVEN FOR THIS CLASS. If for some reason, a student must miss an exam then the student's percentage on the comprehensive final will be used to replace the missing exam score. If a student misses more than one exam, all subsequent missed exam scores will be recorded as zeros. If a student knows ahead of time that he or she will miss an exam, arrangements can be made with the instructor to take the exam **early**.

Course Grade: Your course grade will be based on computer homework assignments, worksheets, quizzes (which may be both announced **and** unannounced), 5 unit exams, and a comprehensive final exam. The grade you receive in this course will be determined by the following:

Exams	50%
Quizzes & Worksheets	20%
MathXL Homework	15%
Final Exam	15%

****The Final Exam will be given on August 7th 10:05 am to 12:20 pm. No Exceptions.**

Final grades will be assigned as follows:

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

Disability Accommodation: "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, Room A201, DUC Student Success Center. The OFSDS telephone number is (270) 745-5004 or (270)745-3030 TTY.

Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

Alice Rowe Learning Assistance Center (ARLAC): ARLAC is housed in the Preston Success Center. The center hours are as follows:

Monday - Thursday	7:45 am - 4:00 pm
Friday	7:45 am - 12:30 pm

Any student having difficulty with course material should take advantage of the **free** tutoring offered at the center.

WKU QEP (Quality Enhancement Plan) Goal: "Western Kentucky University prepares students to be productive citizens of a global society and provides service and lifelong learning opportunities for its constituents."

Course Outcomes:
Upon successful completion of this course (earning a course grade of C or better) students will be able to:

- Solve linear equations in one variable
- Solve linear inequalities in one variable
- Graph a linear equation in two variables
- Factor trinomials
- Factor using the difference of two squares and greatest common factor
- Perform polynomial multiplication
- Perform addition and subtraction of polynomial expressions
- Evaluate polynomials
- Determine the slope of a line from two given points
- Perform division of two monomials

Course Outline: The following course outline is subject to change at the discretion of the instructor. Any changes will be announced in class.

Chapter 1: Review of the Real Number System
1.1 Basic Concepts
1.2 Operations on Real Numbers
1.3 Exponents, Roots, & Order of Operations
1.4 Properties of Real Numbers

Chapter 2: Linear Equations, Inequalities, and Applications
2.1 Linear Equations in One Variable
2.2 Formulas & Percent
2.3 Applications of Linear Equations
2.5 Linear Inequalities in One Variable
2.6 Set Operations & Compound Inequalities
2.7 Absolute Value Equations & Inequalities

Exam 1 (Chapters 1 & 2)

Chapter 3: Graphs, Linear Equations & Functions
3.1 The Rectangular Coordinate System
3.2 The Slope of a Line
3.3 Linear Equations in Two Variables
3.5 Introduction to Relations & Functions
3.6 Function Notation & Linear Functions

Exam 2 (Chapter 3)

Chapter 5: Exponents, Polynomials, & Polynomial Functions
5.1 Integer Exponents & Scientific Notation
5.2 Adding & Subtracting Polynomials
5.3 Polynomial Functions & Graphs
5.4 Multiplying Polynomials
5.5 Dividing Polynomials

Chapter 6: Factoring

6.1 Greatest Common Factors & Factoring by Grouping
6.2 Factoring Trinomials
6.3 Special Factoring
6.4 A General Approach to Factoring
6.5 Solving Equations by Factoring

Exam 3 (Chapters 5 & 6)

Chapter 7: Rational Expressions & Functions

7.1 Rational Expressions & Functions; Multiplying & Dividing
7.2 Adding & Subtracting Rational Expressions
7.4 Equations with Rational Expressions & Graphs
7.5 Applications of Rational Expressions

Exam 4 (Chapter 7)

Chapter 8: Roots, Radicals & Root Functions

8.1 Radical Expressions & Graphs
8.2 Rational Exponents
8.3 Simplifying Radical Expressions
8.4 Adding & Subtracting Radical Expressions
8.5 Multiplying & Dividing Radical Expressions
8.6 Solving Equations with Radicals
8.7 Complex Numbers

Chapter 9: Quadratic Equations, Inequalities & Functions

9.1 The Square Root Property
9.2 The Quadratic Formula

Exam 5 (Chapter 8 & 9)