

MATH 115 -- Elementary Algebra(Section 8559, Online) Fall 2014

Prerequisite: Math 112 with a grade of “C” or better, or an appropriate placement level.

Instructor: Dr. Mohamad Alwash **E-mail:** alwashm@wlac.edu. (310) 287-4216

Office: MSB 212

Textbook: Beginning Algebra, by Aufmann, Barker and Lockwood; 7th Edition.

Institutional Student Learning Outcomes

A) Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence using sound reasoning to specify multiple solutions and their consequences.

B) Quantitative Reasoning: Identify, analyze, and solve problems that are quantitative in nature.

C) Technical Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs.

Program Student Learning Outcomes

1) Apply quantitative thinking processes using mathematical operations to solve common academic, workplace, and family problems. (Theme: mathematical operations)

2) Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)

3) Select appropriate math strategies for solving and handling real life problems involving economics, and family issues. (Theme: mathematical problem solving).

* We expect that students are familiar with the following concepts and skills:

1. Adding, subtracting, multiplying, and dividing whole numbers, fractions, and decimal numbers.
2. Simplifying expressions using order of operations.
3. Changing percents to decimals or fractions.

These concepts will be reviewed in the first chapter.

* By the end of this course students should be able to:

1. Solve linear equations and inequalities with one variable.
2. Solve application problems modeled by linear equations.
3. Graph linear equations and inequalities in two variables.
4. Solve linear systems of two equations.
5. Add, subtract, multiply, and divide polynomials.
6. Factor polynomials.
7. Add, subtract, multiply, and divide rational functions.
8. Solve rational equations and their applications.
9. Simplify radicals and solve equations with radicals.
10. Solve quadratic equations by factoring, completing squares, and the quadratic formula.

Orientation: There will be an on-campus orientation meeting on

Tuesday 9/2/2014 at 1 PM [Room MSA102]

If you have not logged in and participated by 9/8/2014 you may be dropped. Students who are dropped might not be reinstated.

You must do the first quiz by 9/8/2014 to verify your participation.

Homework: Assignments will be given on every chapter. These assignments will not be graded. Questions in the quizzes are mainly from those assignments.

There are many questions at the end of each section for more practice.

Answers to the questions are given at the end of the book.

Quizzes: There will be a quiz every week. The quizzes will make up 28% of course grade.

Tests: There will be two on-campus tests and a final. Each test is worth 20% of the course grade.

The tests are on *Saturdays 10/11/2014 ,11/22/2014; 2PM (Room MSA102).*

Final: The final will be on-campus comprehensive multiple-choice exam.

It is worth 32% of your course grade. The final will be on:

Saturday 12/20/2014, 2 – 4 PM (Room MSA102).

Picture identity cards are required in the on-campus tests.

Important Dates: No Penalty Drop Date: 9/12/2014

Last Day to Drop With a "W": 11/21/2014

Grading A: 90%-100% ; B: 80%-89% ; C: 70%-79% ; D: 60%-69% ; F: 0-59%

Total Points: 1000

Quizzes: 280 Points, Tests: 200+200 = 400 Points, Final: 320 Points

Class procedure:

Read Carefully. Report problems during the orientation.

* Each week we have a lecture, a homework assignment, and a quiz.

These are given in "Modules". Please, read the lecture, read the chapter in the textbook, and practice with the questions in the homework assignment before doing a quiz.

* To enter your answers to a quiz, go to "Tests".

The quizzes have only multiple-choice questions; please enter the letters of the correct answers. You have about a week to do the quiz.

* We post the solutions to the quiz after the due date.

* We also post sample tests and a sample final.