MATH 115--Elementary Algebra, Section 1472   (Fall 2013)

Time: M – Th   9:35-10:50   **Room:**

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

Instructor: Dr. Mohamad Alwash

Email: alwashm@wlac.edu   **Ph:** (310)287-4216   **Office:** MSB-212

Office Hours: M – Th 11:00-12:15

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

Homework: Assignments are given every day. The assignments will not be graded. We discuss some assigned questions during the next class. Please, do not expect that we do all questions in class. For more questions, please come to office hours.

Quizzes: There will be about ten quizzes. I will drop two quizzes and the remaining will make up 8% of the grade. There will be no makeup for a missing quiz.

Tests: There will be six tests. Each test is worth 10% of the grade. Makeup tests are given to students possessing valid excuses. Advanced notice is mandatory.

Final: This is a comprehensive multiple-choice exam. It is worth 32% of the grade.

Attendance: If you miss four days, the instructor has the option of excluding you from the class. Coming 3 minutes late or leaving three minutes early means absent.

Summary: Total 1000 points; Tests 600P; Quizzes 80P; Final 320P.

Grading: A 900 or more, B 800-899, C 700-799, D 600-699, F < 600.

Important Dates: Last day to drop without a "W" 9/6/13, with a "W" 11/15/13.

 Schedule (Tentative)
Weeks 1 – 3: Ch. 1 – 3;   Q1,2(9/3, 9/12)   Test1: Monday 9/16
Weeks 4 – 6: Ch. 4, 5;   Q3-Q5(9/19, 9/23, 9/26) Test2: Monday 10/7
Weeks 7, 8: Ch. 6, 7;   Q6(10/14)   Test3: Monday 10/21
Weeks 9, 10: Ch. 8;   Q7,8(10/24, 10/31)   Test4: Monday 11/4
Weeks 11, 12: Ch. 9;   Q9(11/14)   Test5: Monday 11/18
Weeks 13, 14: Ch. 10,11;   Q10(11/21)   Test6: Monday 12/2
Week 15, Review

Final: Wednesday 12/11; 10:15-12:15

Note: Phones and devices with communication ability are not allowed.

Institutional Student Learning Outcomes
A) Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence, and 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.

Math Program Student Learning Outcomes
1. Apply quantitative thinking processes using basic mathematical operations (addition, subtraction, multiplication, division) to solve common academic, workplace, and family problems.   (Theme: Quantitative thinking; mathematical operations)

2. Analyze and interpret spatial and graphic data (schedules, maps, tables, graphs, and geometric figures). (Theme: spatial and graphic data).

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

4. Apply advanced mathematical concepts and tools (algebra, calculus) essential in upper division academic work and/or workplace tasks. (Theme: advanced mathematical operations—algebra, calculus)

5. Select appropriate math strategies for solving and handling application problems involving (for example) finance, science, 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.