

**Three Rivers Community College**  
**Elementary Algebra – Self-Paced MAT 095**  
**Fall 2011**

**Instructor:** Susan L. Hawes  
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**Text:** Beginning Algebra, 5th edition, by Martin-Gay

**MML Course Code:** hawes56667

**Credit:** 3 credit hours (this course does not count towards graduation credit requirements)

**Course Description:** This course extends the basic algebra skills acquired in MAT 075 or equivalent. The topics include: solving and applying linear equations and inequalities, exponents, polynomials, factoring, graphing, systems of equations and scientific notation.

**Prerequisite:** MAT075, appropriate placement score, or equivalent. A grade of “C” or greater is required to pass this course.

**Course Requirements**

**Attendance:** If you are not going to attend class, I expect an e-mail from you weekly, before class begins on Tuesday, 5:30 p.m., addressing:

- whether you are attending class that night or working from home
- whether you are in accordance with the Goal Sheet. If not, why? And your plan of action

**Grading:**

- Homework 10%
- Quizzes 25%
- Tests 40%
- Final Exam 25%

**Final Exam is NOT on the computer**

**Bring to *Every* Class or have in work area at home:**

- Notebook
- 2 pencils, pen
- highlighter

**Supplementary Tools & Resources:**

- MyMathLab software
- Learning Center/TASC (1<sup>st</sup> floor, C-Wing, near library)
- Study Plan on MyMathLab (while you work, it records topics you need practice in)

**Notebook Requirement:**

- Label sections
- Take notes in pen, if you watch video, or “help me solve this”
- Write problem from computer in pen
- Do work in pencil
- highlight what you might want to put on 4x6 index card for final exam
- highlight what you may need extra practice in when you are reviewing
- Show all your steps so *someone else* can follow them and you can study from them. Your final exam will be graded based on steps AND the correct answer.
- Enter your answer into the computer. If you get a problem incorrect, you can choose “similar example” to get another problem with a chance to replace incorrect result with correct result. 😊

**Final Exam:**

- **All coursework must be completed before final exam date**
- In class, on paper, 12/13/11
- Allowed - multiplication chart, no calculator
- Allowed - 4x6 index card with formulas, no exact number examples
  - As you do coursework, highlight what you might want to put on an index card so you can easily see & transfer when you’re doing review for final exam

**Stay up-to-date according to Goal Sheet**

**ALL coursework must be completed by the final exam date:  
December 13, 2011**

### **MAT095 Course Outcomes**

1. Evaluate algebraic expressions
2. Determining if a given number is a solution to an equation or an inequality
3. Determining if an ordered pair is a solution to a linear equation in 2 variables
4. Add, subtract, multiply, and divide real numbers and raise a real number to an integer power
5. Add, subtract, multiply, and divide Polynomials
6. Simplify, add, subtract, multiply, and divide Radicals
7. Rules for Exponents
8. Greatest Common Factor (factoring)
9. Factor by Grouping
10. Factor trinomials of the form  $x^2 + bx + c$
11. Factor trinomials of the form  $ax^2 + bx + c$
12. Factor Perfect Square Trinomials
13. Factor the Difference of Two Squares
14. Factor Completely
15. Converting between Scientific Notation and standard notation
16. Order of Operations (manipulation)
17. Properties of Real Numbers (manipulation)
18. Simplifying Algebraic Expressions (manipulation)
19. Graphing in a Rectangular Coordinate System
20. Graphing Linear Equations by plotting points, using intercepts, and using the Slope-Intercept form
21. Graphing the solution to a Linear Inequality in one variable.
22. Graphing a System of Linear Equations in two variables
23. Rates of change (slopes)
24. Identifying Linear Equations (Linearity)
25. Solving Linear Inequalities in one variable
26. Finding the Equation of a Line (manipulation)
27. Solving Linear Equations in one variable
28. Solving formulas for a specified variable
29. Solving a System of Linear Equations in two variables (two methods)
30. Solving equations with degree 2 or greater by factoring
31. Two forms for the equation of a line (transforming back and forth)
32. Finding an unknown number word problem
33. Solving consecutive numbers (including odd and even) word problems
34. Solving dimension problems using geometric formulas
35. Solving Percent and Mixture problems
36. Solving table problems such as rate, time, and distance
37. Solving linear inequality problems
38. Solving linear equation in two variables problems
39. Solving System of 2 linear equations in 2 variables word problems
40. Solving factorable Quadratic Equation word problems

## **Class Cancellation**

Facebook Status  
MyMathLab Announcement  
Sign on Classroom Door  
Phone Tree