Three Rivers Community College
Elementary Algebra -- MAT 095-T9
T/Th 4:00 – 5:15 pm
Spring 2013

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Text: Elementary & Intermediate Algebra: Graphs & Models
4th ed.- Bittinger, Ellenbogen, Johnson

MyMathLab Course Code hawes18909

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: Attendance is mandatory. If you miss class, due to emergency, it is *your responsibility* to get the notes from a classmate. Keep up with assignments; immediately find out what you missed; stay up-to-date. An absence is not an excuse for handing in a late assignment. A classmate's phone number is a good "just in case" plan.

Grading: There will be four exams, including the final, each worth 20%. There will be several unannounced quizzes, typically given at the beginning of class, so it is to your advantage to be on time. If I distribute the quiz before you arrive to class, your quiz grade will be a zero. **There are no make-up tests/quizzes**. The two lowest quiz scores will be dropped (this allows for two absences or late entry due to emergency). The quiz average will be equivalent to one exam grade and is, therefore, 20% of your course grade. *Come to every class prepared for a potential quiz.*

MyMathLab Homework (HW): Homework is found at www.coursecompass.com Homework is critical to your success in this class and will be collected/recorded. As part of your HOMEWORK assignment, you will be expected to read the associated material from the text (online, if you didn't purchase text).

- A grade of 75 or higher is expected on HW.
- Take a sheet of paper out of your 3-ring binder
    - This allows you to flip your notes back-and-forth, yet have HW paper in front of you.
    - Since math is cumulative, you may have to refer to prior sections
- Have your class notes for corresponding section in front of you
- Label HW with section
    - if I ask to see the assignment or when studying, sections are easily found
- Write the problem from the computer in pen.
- Do the work/steps in pencil
- Follow the steps from your notes.
    - Do not turn to the computer for help unless you have *extensively tri*ed to follow your notes.
    - If you consistently can't follow your notes, then you need to personalize them more during class time;
    - Write short notes to yourself, in your own words, as to how we went from step-to-step.
    - Don't assume you will remember what is said in class; it's easy to forget. Write it down.
- If you get a problem wrong, choose "similar exercise" to get a new problem.
    - Cross out incorrect problem so when studying you won't look at it.
- When finished, print results page.
    - Turn in result page next class.
    - The HW is due the class after lecture on a section. No late assignments accepted without a valid reason.
- Put homework/steps sheet in your 3-ring binder after the notes for that section.
- Use different sheets for each section, if you have more than one assignment for that day.

Class Work(CW): If there is time after the lesson, class work will be assigned. Class work expectations are the same as Homework expectations; refer above. EXCEPT:

- Quality, not Quantity
    - IF you don't finish the class work assignment, you do NOT have to finish it for homework.
    - HOWEVER, CW gives you good insight as to what types of problems I find "interesting" for a quiz/test.

Bring to *Every* Class:

- 3-ring binder w/loose leaf paper
- highlighter
- 2 pencils/pen

- **Organization of Binder:**
- Class Notes
- Classwork (CW) – labeled with section
- Homework (HW) – labeled with section
- Quiz - after last section it covers
- Test - after last chapter it covers

Supplementary Tools & Resources:

- MyMathLab software
    - Study Plan: Individualized Practice
- Learning Center/TASC
    - Free tutoring!

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

MyMathLab Announcement
Sign on Classroom Door

Class Withdrawal

If you find it necessary to withdraw from the class, it's important you submit the correct paperwork with the Registrar's office. If you do not file the correct paper work and stop attending class before the 60% point, you will receive an N grade, as there is no basis for grading you

Disabilities Statement: If you have a disability which may require classroom or test-taking modifications, please see Chris Scarborough. Proper documentation must be provided to me before accommodations can be made.