

Three Rivers Community College
Division of Mathematics

MAT*K095 6-8:45 ~ D107

Course: Elementary Algebra Foundations MAT* K095 T16

CRN: 531399

Prerequisites: Math 075 with a grade of C or better OR Acceptable Placement Score

Instructor: Dawn Mallory

Phone #: (860) 235-546

E-mail: mallorydaw@reg8.k12.ct.us

Office Hours: None... but IF available, I will be in the classroom 30-40 minutes ahead of time

Text: Beginning Algebra **5th Edition**

by Elayn Martin-Gay

I do NOT require the CD – often students like to use this but it’s not a requirement for me!

Required materials:

Scientific Calculator: A TI-83 **OR** TI-83 Plus graphing calculator will be needed for a later Math course.

Regular 2-subject notebook or 3-ring binder with paper for notes

Recommended Materials:

- a) Folder: recommended for information (class syllabus, classwork handouts, MyMathLab info, etc)
- b) Ruler: for graphing straight edges.

Course Supplement:

MyMathLab online resource program.

Course Description:

This course extends the basic algebra skills acquired in MAT* K075. The topics include signed numbers, solving first-degree equations, exponents, operations on polynomials, factoring methods, graphing, systems of linear equations, inequalities, radicals, and scientific notation.

Course Objectives:

The objective of this course is to enable the student to develop an understanding of the algebraic concept of “variable” and to work with, interrelate, and apply algebra governing: signed numbers, solutions of linear equations and inequalities, exponents, operations on polynomials, factoring and solutions of quadratic equations by factoring, systems of linear equations, radicals, and the relationship between the line and its equation. See attached page for a finer breakdown.

Attendance Policy:

“Absence from class may jeopardize student performance and the overall value of classroom instruction.” You are strongly encouraged to attend all class meetings. **You are responsible for any note taking, class assignments, and homework given in your absence.** You are also expected to arrive **on time** to class.

Withdrawal Policy:

Students may withdraw, in writing at the Registrar’s Office, for any reason up through Friday, December 9. No withdrawals will be accepted after Friday, December 9.

Evaluation and Grading Criteria:

Course Grades will be calculated based on the following percentages:

20% Homework

20% Quizzes

45% Tests

15% Final Exam

Homework:

Homework will be assigned in the math book each class. All assignments are due at the next class time.

Test:

Tests will be administered in class. You are expected to be present in class on a day of a given test. If you are going to be absent for a test, you must notify me by email or phone before or on the day of a test or you will not be allowed a make-up. If you are allowed to make-up the test, please note that your make-up version will be more difficult than the original test. You will also be solely responsible for scheduling an appointment with me for that make-up.

Extra Credit:

There is no "extra credit" given in this course. Students who struggle with course assignments do not need "extra" work.

Math Lab:

The Three Rivers Math Computer Lab is located in the TASC room in C-117 (next to the new library).

Grades: Final grades will be calculated and transferred to the following letter grades.

93 and above	A	73-76	C *
90-92	A-	70-72	C- *
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D
77-79	C+	Below 60	F

* A letter grade of C is required to advance to MAT* K137. A letter grade of C- will not meet the requirement.

Class Cancellation Policy:

If the instructor is late, the class is expected to wait 15 minutes before leaving or until informed of a cancellation by a college official. Information on weather related closings/late openings concerning Three Rivers Community College can be obtained through local radio and television stations, or via the college website (<http://www.trcc.commnet.edu>).

Accommodations:

Students with Learning Disabilities should contact the Learning Specialist, Chris Scarborough at 860-892-5751 or at cscarborough@trcc.commnet.edu as soon as possible to ensure timely accommodations. Students with Physical Disabilities should contact Judy Hilburger at 860-892-5744 or at jhilburger@trcc.commnet.edu or Matt Liscum at 860-383-5420 or via email at mliscum@trcc.commnet.edu to facilitate accommodations.

Cell Phones:

"Cell phones and beepers are allowed in class only if they are turned **off** or turned to a silent mode. Under **NO** circumstance are telephones to be answered in class." Students who ignore this policy will be asked to **leave class**. If there are extenuating circumstances, the student must contact the instructor prior to class to make the proper accommodations.

Academic Integrity Policy:

Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; clearly document the sources of the material you use from others; and act at all times with honor. Please see the Three Rivers Community College catalog for the college's Academic Integrity Policy. I do make up multiple tests to discourage plagerism!

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

Math 095 Course Content

- 1.4 Intro to Variable Expressions and Equations
- 1.5 Adding Real Numbers
- 1.6 Subtracting Real Numbers
- 1.7 Multiplying and Dividing Real Numbers
- 1.8 Properties of Real Numbers – Test 1

- 2.1 Simplifying Algebraic Expressions
- 2.2 The Addition Property of Equality
- 2.3 The Multiplication Property of Equality
- 2.4 Solving Linear Equations
- 2.5 An Intro to Problem Solving
- 2.6 Formulas and Problem Solving
- 2.7 Percent and Mixture Problem Solving
- 2.8 Further Problem Solving
- 2.9 Solving Linear Inequalities
- TEST 2

- 3.1 Reading Graphs and the Rectangular Coordinate System
- 3.2 Graphing Linear Equations
- 3.3 Intercepts

3.4 Slope and Rate of Change

3.5 Equations of Lines

Test 3

4.1 Solving Systems of Linear Equations by Graphing

4.2 Solving Systems of Linear Equations by Substitution

4.3 Solving Systems of Linear Equations by Addition

4.4 Systems of Linear Equations and Problem Solving

TEST4

5.1 Exponents

5.2 Adding and Subtracting Polynomials

5.3 Multiplying Polynomials

5.4 Special Products

5.5 Negative Exponent and Scientific Notation

5.6 Dividing Polynomials

TEST 5

6.1 The Greatest Common Factor and Factoring by Grouping

6.2 Factoring Trinomials of the Form $x^2 + bx + c$

6.3 Factoring Trinomials of the Form $ax^2 + bx + c$

6.5 Factoring Binomials

6.6 Solving Quadratic Equations by Factoring

6.7 Quadratic Equations and Problem Solving

Test 6

8.1 Intro to Radicals

8.2 Simplifying Radicals

8.3 Adding and Subtracting Radicals

8.4 Multiplying and Dividing Radicals

FINAL EXAM – CUMULATIVE

THREE RIVERS COMMUNITY COLLEGE

Course: Elementary Algebra – Summer 2011

What you need to get started:

1. A Valid Email Address
2. A Course ID #
3. A Student Access Code (provided with the purchase of your new textbook)

Step-by-Step Registration Instructions

- 1) Go to www.coursecompass.com and click on Register, as a student. (You only need to register ONCE)
- 2) Enter your:

six-word student access code, found in package accompanying textbook, pull perforated strip

school zip code: **06360**

country: **United States**

- 3) Enter the Course ID which is:
- 4) Fill in the requested information, and then create your unique Login Name and Password.
You will use the login name and password you create to access My Math Lab the remainder of the semester

Login Instructions (after you have registered):

- 1) Go to www.coursecompass.com
- 2) Click **Log in** under the **STUDENT** area.
- 3) Enter the login name and password that you created during registration.
- 4) At the **Welcome** page, you will see your course under the heading **Courses you are taking**. Click the course name to enter My Math Lab.
- 5) You must enable pop-ups from this site.
- 6) The first time you enter the site from your computer and anytime you use a new computer, click on the software **MyMathLab Installation Wizard** link in the Announcements page. This wizard will walk you through the installation of the software you will need to run MyMathLab.

Technical problems:

Call Tech Support at 800-677-6337, Monday – Friday 9am – 6pm EST. (Additional help can be found on the Announcements page by clicking on Student Help or viewing the tip sheets.)

GOOD LUCK THS SEMESTER!

Dawn Mallory

095 Algebra My cell phone is 235-5476. My email is:

mallorydaw@reg8.k12.ct.us Attendance for the classes is necessary for a good grade. While I DO understand parental duties, I want you to make every effort to attend class, to hear the lesson and communicate with myself and others for good learning.

Syllabus: I expect that you will either do the homework in the math notebook online or show me your homework. You will receive points for each assignment. Please do NOT bring a cell phone to class. Not only do I find it annoying it is also distracting to your peers. I will be in the room at 5:30 pm each Wednesday for anyone who needs extra help.

8/30	1.2, 1.4-1.8
9/06	quiz on 1; intro 2.1-2.4
9/13	2.5-2.8
9/20	test on one and 2; intro 3.1-3.2
9/27	3.3 & 3.6
10/04	test on three ; intro 4.1-4.2
10/11	4.3-4.4
10/18	test on 4; intro 5.1-5.2
10/25	5.3 - 5.5
11/01	intro 6.1-6.3
11/08	6.4-6.7
11/15	test on 6 intro 8.1-8.4
11/29	test on 8 and start final review
12/06	review for final
12/13	final