

## Math 095 Syllabus for Fall 2011

### Three Rivers Community College

**Course:** Elementary Algebra Foundations (Mat\*095 T5)

**CRN:** 30444

**Location/Times:** Room D219, 2:30 - 3:45 Tuesday and Thursday

**Prerequisites:** Math 075 with a grade of C or better OR acceptable placement score

**Instructor:** Gary Hoyt

**Office/Hours:** D205 (Adjunct offices), 1:55 --2:25 Tue and Thr or by appointment

**Email:** [ghoyt@trcc.commnet.edu](mailto:ghoyt@trcc.commnet.edu)

**Phone:** 860-887-3692

**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, graphing, systems of linear equations, inequalities, radicals and scientific notation. **(NOTE: This course does not count towards the minimum requirements for graduation)**

**Textbook:** Beginning Algebra (fifth edition) by Elayn Martin-Gay

**Attendance:** It is expected that students will make every effort to attend all classes. If it should be necessary to miss a class, the student is responsible for the missed material as well as the assignment that was given.

**Homework:** Homework will be an integral part of this course. It is essential that you attempt all assignments and that you keep these assignments in a notebook that is dedicated solely to math homework. It will not be possible to reach your potential in this class without doing the homework on a regular basis. It is also recommended that you record the material presented in class in a separate notebook, not mixing pages of homework with pages of notes.

**Calculators:** Calculators may be used in this class, but they may not be used on a portion of the first test covering chapters one and two. The material that must be done without a calculator will be identified for you as it is presented.

**Cell Phones:** Cell phones can not be used as calculators and should not be evident during class. Please turn all cell phones off as you enter the room. If there is are extenuating circumstances please see me and we will discuss the matter.

**Withdrawal from Class:** Students may withdraw in writing at the Registrar's Office. The last day to withdraw from classes this semester is Dec. 9, 2011.

**Extra Help:** Three Rivers CC offers free tutoring through the Tutoring Academic Success Center (TASC), located in room C-117. Peer tutoring and peer study groups are available. Students may also see me during my regularly scheduled office time or by appointment as well.

**Class Cancellation:** If school is cancelled, delayed or closing early, announcements will be made on the local radio and television stations. The school web site will also be used to make such announcements. ([www.trcc.comnet.edu](http://www.trcc.comnet.edu)) Additionally, students may register to receive notification through the myCommNet Alert notification system. Notification will be sent via email and text message to those who are registered. To register, log in at <http://my.comnet.edu/> and follow the myCommNet Alert link. You may also call the College's main telephone at 886-0177, press 1, and listen to the taped announcement.

If I find it necessary to cancel class, I will email all of you with as much advance notice as possible. I will use the email addresses that are on my class roster. I will send a test email later today to be certain that I have a valid email address for all. Email addresses can be updated by going to Student Services in the A-1 wing.

**Disabilities Statement:** Students with a documented disability are provided supportive service and accommodations to assist them with their academic objectives. Services are strictly confidential. Disability services may include individualized accommodations, advising, advocacy, counseling, technical assistant and referral information. Accommodations cannot be given unless I receive notification from the Disabilities Counseling Service (383-5240). It is the student's responsibility to secure this assistance where appropriate.

**Academic Honesty:** 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 and act at all times with honor.

**Tests:** There will be four chapter tests and a final exam in this course. **All tests must be taken at the regularly scheduled time.** A missed test will result in a grade of a 0 for that test unless **extremely** extenuating circumstances are **proven** to be present. Anyone who feels that such circumstances exist (causing them to miss a test) needs to communicate that to me as soon as possible. Please do not miss a test unless it is absolutely unavoidable.

**Grading Procedure:** The average of the four chapter tests will represent 70% of your final grade in this course, with the final exam accounting for the remaining 30%.

**Instructor Discretionary Days:** There are two days in the fall semester that are listed on the college's academic calendar as discretionary days. They are Nov. 12 (Sat) and Nov. 22-23 (Tue/Wed). **We will hold class on Nov. 22 and you should plan to be in attendance. Dec. 20 is listed as a makeup session and will be used only if necessary.** If we are on schedule with respect to covering the material, I will consider making these days optional and use them to provide extra help.

## Math 095 Course Outcomes

1. Evaluate algebraic expressions
2. Determine if a given number is a solution to an equation or an inequality
3. Determine if an ordered pair is a solution to a linear equation in two 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. Factoring using the greatest common factor
9. Factor using grouping
10. Factoring trinomials of the form  $x^2 + bx + c$
11. Factoring trinomials of the form  $ax^2 + bx + c$
12. Factor perfect square trinomials
13. Factor the difference of two squares
14. Factor completely, using multiple methods
15. Converting between scientific notation and standard notation
16. Order of operations
17. Properties of real numbers
18. Simplifying algebraic expressions
19. Graphing in a rectangular coordinate system
20. Graphing linear equations by plotting points, using intercepts, and using 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 – slope
24. Identifying linear equations
25. Solving linear inequalities in one variable
26. Finding the equation of a line
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 second degree equations (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 number word problems
34. Following dimension problems with 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 equations in two variables problems
39. Solving systems of two linear equations in two variables word problems
40. Solving factorable quadratic equation word problems

## TENTATIVE CLASS SCHEDULE

Aug. 30	1.2, 1.4, 1.5	symbols and sets, order of operations, addition of real numbers
Sept. 1	1.6, 1.7	subtraction, multiplication and division of real numbers
6	1.8, 2.1	properties of real numbers, simplifying algebraic expressions
8	2.2, 2.3, 2.4	addition and mult. properties of equality, solving linear equations
13	2.5, 2.6	problem solving, formulas and problem solving
15	2.7, 2.8, 2.9	percent and mixture problems, solving linear inequalities
<b>20</b>	<b>TEST #1</b>	<b>CHAPTER 1 AND CHAPTER 2</b>
22	3.1, 3.2, 3.3	rectangular coordinate system, graphing linear equations, intercepts
27	3.4	slope and rate of change
29	3.5	linear equations
Oct. 4	4.1, 4.2	solving systems of linear equations by graphing and by substitution
6	4.3	solving systems of linear equations by the addition method
11	4.4	systems of linear equations and problem solving
<b>13</b>	<b>TEST # 2</b>	<b>CHAPTER 3 AND CHAPTER 4</b>
18	5.1	exponent rules
20	5.2, 5.3	adding, subtracting and multiplying polynomials
25	5.4, 5.5	special products, negative exponents and scientific notation
27	5.6	dividing polynomials
<b>Nov. 1</b>	<b>TEST # 3</b>	<b>CHAPTER 5</b>
3	6.1	greatest common factor factoring and factoring by grouping
8	6.2, 6.3	factoring quadratic trinomials
10	6.4	factoring quadratic trinomials using grouping
15	6.5	factoring binomials
17	6.6	solving quadratic equations by factoring
22	<b>TEST # 4</b>	<b>CHAPTER 6</b>
24	Thanksgiving	the college is closed – no class
29	8.1	intro to radicals
Dec. 1	8.2	simplifying radicals
6	8.3	adding and subtracting radicals
8	8.4	multiplying and dividing radicals
13		review for final exam
15		<b>FINAL EXAM</b>
20		To be determined