SYLLABUS – MAT095 Elem. Algebra Foundations – Spring 2011

- CRN 10321, T14
- Room D122, Mon., Wed., and Fri., 1:00 p.m. – 1:50 p.m.
- Three Rivers Community College, 574 New London Turnpike, Norwich, CT 06360

ADJUNCT INSTRUCTOR: Mrs. Mary Anne Stewart
- Office Hours: Mon., Wed., and Fri., 12:00 p.m. – 12:55 p.m., Adjunct Office Room D-205 (E)
- Voice Mail: (860) 886-0177, ext. 2114 *(Leave brief message)*
- E-Mail: mstewart@trcc.commnet.edu ***(You must include a subject line and your name in email.)***

COURSE DESCRIPTION

This course extends the basic algebra skills acquired in MAT075, Prealgebra. The topics include signed numbers, solving first-degree equations, exponents, polynomials, factoring, graphing, systems of linear equations, inequalities, radicals, and scientific notation. **This course does not count towards the minimum requirements for graduation.** Prerequisite: Acceptable placement score or MAT075 with a "C#" grade or better. A thorough knowledge of basic math skills is needed for this course.

REQUIRED TEXT

Beginning Algebra, 5th ed., Martin-Gay, ©2005 Pearson Education, Inc., ISBN:9780321600523

SUPPLIES

- One (1) three-ring notebook and tabbed dividers or similar to create sections in your notebook
- Pencils and erasers
- Paper for homework and taking notes in class
- One 6" or 12" ruler
- NO calculators

COURSE SCHEDULE, ASSIGNMENTS, and TESTS

See attached sheets. Place these at the front of your notebook and refer to them for each class.

ASSIGNMENTS

Students are expected to work on assignments regularly and to seek assistance if the problems are not understood. All work should be kept in a notebook which may be reviewed by the instructor.

METHOD OF EVALUATION and GRADING SYSTEM

- **3 In-class tests, 20% each**. Tests 2 and 3 will be cumulative. No make-up tests. The student's final exam grade will be used in place of any missed tests.
- **Quizzes, 15%.** Quizzes will be given every Friday that class is scheduled. The sum of the quiz grades will count as 15% of your grade for the course. No make-up quizzes.
- **Final exam, 25%.** The final exam is mandatory and cumulative, chapters 1 through 6. The final exam will be given on the scheduled date, Monday, May 16. No make-up, no re-take.

These letter grades and corresponding numerical grades will be used for tests, final exam, and course grade: A (94–100), A– (90–93), B+ (87–89), B (83–86), B– (80–82), C+ (77–79), C (73–76), C– (70–72), D+ (67–69), D (63–66), D– (60–62), F (below 60)

ACADEMIC INTEGRITY POLICY

Each student is expected to demonstrate his/her knowledge of the subject matter on each test and the final exam. If a student is caught cheating on a test or the final exam, he/she will receive a grade of zero, F, and will not be allowed to make-up that test or final exam.

COLLEGE WITHDRAWL POLICY

May 9   Last day to withdraw from classes (Withdraw at the Registrar's Office)

ATTENDANCE

Students are expected to attend all classes, to arrive for class on time, and to remain for the duration of the class meeting. It is the student's responsibility to request any missed work, assignments, or materials before the next class. Students who are consistently tardy, leave class early, and/or walk in and out of class are a distraction to the instructor and the other students. This results in a disruption of the class and the learning process. After the first week of classes, students who arrive late will be seated in the classroom at the discretion of the instructor.

DISABILITIES STATEMENT

Students with hidden or visible disabilities who may require special accommodations and support services are encouraged to notify the instructor and Chris Scarborough, (860) 892-5751, who is coordinating services to students with disabilities, during the first two weeks of class.

RULES of CONDUCT in CLASS

- Respect each person.

- No food in the classroom.

- Electronic/digital devices: Cell phones, beepers and similar devices must be turned off or silenced during class. These devices are NOT to be used in class. When there are extenuating circumstances that require a student be available by such a device, the student must speak to the instructor prior to class, so that together they can arrive at an agreement.

- Student Behavior: "The College has the right and responsibility to take appropriate action when a student's conduct directly and significantly interferes with the College's educational mission and the rights of others to pursue their educational objectives in an environment conducive to learning." - *from the TRCC Student Handbook*
  Such action will, at minimum, be the dismissal of the student from the remainder of that day's class and any graded work from that day will be graded zero, F, with no possibility to make-up that work.

CLASS CANCELLATION POLICY

If class is cancelled by the school, pay attention to radio and TV announcements, call the college's main phone number 860-886-0177, or visit the college's home web page www.trcc.commnet.edu.
If class is cancelled by the instructor, a notice will be placed on the classroom door. If time permits, students may be notified by a message on the instructor's voice mail, by email, or by phone.

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