

SYLLABUS

MAT 095 – Elementary Algebra

SPRING 2011, MW 2:00 – 3:15 PM, Room D224
CRN# 10524

Three Rivers Community College
Norwich CT 06360

Instructor
David M. Mitchell

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Office Location: Adjunct Professor Shared Offices D-205-E
Office Hours: Wednesdays 12:00 Noon – 1:45 PM or By Appointment

Required Text
Beginning Algebra, 5th edition, by Elayn Martin-Gay

MyMathLab Course ID: kennedy07608

Method of Evaluation:

Attendance	5 %
Homework	15 %
Quizzes (6)	60 % (10% each)
Final Exam	20 %

<u>Letter Grade</u>	<u>Number Grade</u>
A#	≥ 93 and ≤ 100
A-#	≥ 90 and < 93
B+#	≥ 87 and < 90
B#	≥ 83 and < 87
B-#	≥ 80 and < 83
C+#	≥ 77 and < 80
C#	≥ 73 and < 77
C-#	≥ 70 and < 73
D+#	≥ 67 and < 70
D#	≥ 63 and < 67
D-#	≥ 60 and < 63
F#	< 60

This course is a developmental course, and thus the following section quoted from “General Academic Information” applies:

Grades for Developmental Courses:

Developmental courses do not carry grade points, and the credits assigned to these courses do not count towards the required credits necessary for graduation.

Developmental courses are graded A#, A-#, B+#, B#, B-#, C+#, C#, C-#, D+#, D#, D-#, and F# are not calculated in the Grade Point Average.

Grades received and credits earned or not earned in developmental courses do not affect graduation honors in any way, positively or negatively. Credits received in developmental courses do not count towards graduation and consequently cannot be applied towards the 25% minimum residency requirement.

This course requires a grade of C# or better to pass and go on to the next math course.

Learning Outcomes and Course Description:

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

Course Schedule & Homework

Date	Homework Due at Start of Class		Class Instruction
	Each assignment refers to the "Exercise Set" at the end of each section.		
1/24/11			Intro
1/26/11			Sections 1.2, 1.4
1/31/11	1.2 #23–75 odd	1.4 #1-41 odd, 57-61 odd, 65-69 odd, 75-91 odd	Sections 1.5, 1.6
2/2/11	1.5 #17-63 odd	1.6 #11-75 odd	Sections 1.7, 1.8
2/7/11	1.7 #11-37 odd, 43-61 odd, 69-93 odd	1.8 #31-69 odd	QUIZ 1 (1.2, 1.4–1.8)
2/9/11			Sections 2.1, 2.2
2/14/11	2.1 #33-57 odd, 71-81 odd	2.2 #1-15 odd, 47-69 odd	Sections 2.3, 2.4
2/16/11	2.3 #49-81 odd	2.4 #37-65 odd	Sections 2.5, 2.6
2/21/11	Presidents' Day		NO CLASS
2/23/11	2.5 Handout, #1-15 odd, 25-35 odd, 49, 55, 59	2.6 #1-27 odd, 37-47 odd	Sections 2.7, 2.8
2/28/11	2.7 #27-53 odd	2.8 #19-31 odd	QUIZ 2 (2.1–2.8)
3/2/11			Sections 2.9, 3.1
3/7/11	2.9 #1-27 odd, 51-63 odd, 67, 75, 79	3.1 #11-31 odd, 35, 39-47 odd, 61-65 odd	Sections 3.2, 3.3
3/9/11	3.2 #1-29 odd, 41-45 odd, 51, 53	3.3 #1-7 odd, 13-31 odd, 45, 47	Sections 3.4, 3.5
3/14/11	Spring Break		NO CLASS
3/16/11	Spring Break		NO CLASS
3/21/11	3.4 #1-17 odd, 33-39 odd, 51-57 odd, 61, 67, 69	3.5 #1-55 odd	Review Session
3/23/11			QUIZ 3 (2.9, 3.1–3.5)
3/28/11			Sections 5.1, 5.5
3/30/11	5.1 #1-57 odd, 61-75 odd, 89, 93, 101	5.5 #27-75 odd, 81-85 odd, 97-103 odd	Sections 8.1, 8.2
4/4/11	8.1 #31-63 odd	8.2 #33-79 odd	Sections 8.3, 8.4
4/6/11	8.3 #1-41 odd, 53-59 odd	8.4 #17-69 odd	QUIZ 4 (5.1, 5.5, 8.1–8.4)
4/11/11			Sections 4.1, 4.2
4/13/11	4.1 #1-17 odd, 39-45 odd	4.2 #9-33 odd	Sections 4.3, 4.4
4/18/11	4.3 #1-27 odd	4.4 #7-21 odd, 27-33 odd, 39, 41	Sections 5.2, 5.3
4/20/11	5.2 #1-17 odd, 23-43 odd, 55-61 odd	5.3 #1-45 odd	Sections 5.4, 5.6
4/25/11	5.4 #31-77 odd	5.6 #33-55 odd	QUIZ 5 (4.1–4.4, 5.2–5.4, 5.6)
4/27/11			Sections 6.1, 6.2
5/2/11	6.1 #1-63 odd	6.2 #23-67 odd	Sections 6.3, 6.4
5/4/11	6.3 #39-79 odd	6.4 #1-37 odd	Sections 6.5, 6.6
5/9/11	6.5 #35-65 odd	6.6 #1-43 odd	QUIZ 6 (6.1 – 6.6)
5/11/11			Review Session
5/16/11			FINAL EXAM
5/18/11			

Communication with Instructor

If you need to contact me outside of class, please use my email, dmitchell@trcc.commnet.edu. I have a nifty iPhone (**which I do not use in class**) and I will respond to your email with alacrity. This is the only reliable way of contacting me.

My Math Lab

No work you do on My Math Lab will be graded, but it is a valuable study tool. You may read the textbook and work on problems online. My Math Lab has a variety of learning options to choose from, which may be useful if (when?) my in class instruction completely confuses you on a particular topic.

Homework

Homework will be checked at the start of each class, but not collected. Each section problem set counts as one homework. Each problem set will only be graded on a complete / not complete basis. If you are late to class, your homework will not be accepted. Please copy the question (within reason), in addition to writing the answer. The idea is for you to have something on paper you can use to help study.

Collaboration

You are encouraged to study with others in the class, and work on homework together to better understand the topics. However, copying another's homework without attempting to solve or understand the problem yourself violates the academic integrity policy, and does not help you learn mathematics. Having someone else in the class help you is a very powerful way to learn. Do not let personal pride get in the way of asking others in the class for help.

Is It On the Quiz (or Final)?

The textbook sections covered are clearly stated on the syllabus, and any changes will be announced before a quiz or exam. Anything in those textbook sections, even if not covered in class, may appear on the quiz or exam. At the same time, any mathematics topic I cover in class while teaching those sections, even if it is not covered in the book, may appear on the quiz or exam. **In addition, on each quiz, there will be one question from any section we have covered previously in the course.**

Attendance

Attendance is taken every class period and is essential in successfully completing this course. Attending class regularly is expected and will be a factor in my evaluation of student performance.

No Make-ups

Quizzes that are missed will only be available for make-up if the student has an extenuating circumstance and has **emailed** the instructor **prior** to the test. Exceptions to this rule will only be allowed in **truly** exceptional circumstances and at the sole discretion of the instructor.

Calculators

A basic calculator with a square root key is required for this course. You may use a graphing calculator or a scientific calculator if you wish. Do not use the calculator on your cell phone; you must use a separate calculator.

Cellular Phones and Beepers

Cellular phones and beepers are allowed in class or in the Learning Resource Center **ONLY** if they are turned off or set in a silent mode. **Under no circumstances are phones to be answered or used in class.** When there are extenuating circumstances which require a student to be available by phone or beeper, the student should speak to the instructor prior to class, so that together they can arrive at an agreement.

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.

College Withdrawal Policy

A student who finds it necessary to discontinue a course must complete a withdrawal form in the Registrar's office. The deadlines to withdraw are printed in the academic calendar on the TRCC website. Students who do not withdraw but stop attending classes will be assigned an F#. Eligibility for refund of tuition is based upon the date of withdrawal when received by the Registrar's office.

Disabilities Statement

If you have a hidden or visible disability which may require classroom or test taking modifications, please be sure to see me as soon as possible. If you have not already done so, please be sure to contact the Student Development Office, (860) 383-5217, to register with a disability specialist.