30137 T4	MWF 9:00 am – 9:50 am	D 224
30138 T19	MWF 10:00 am – 10:50 am	D 122
30136 T20	MWF 1:00 pm – 1:50 pm	D 109

INSTRUCTOR: Dr. Kelly Molkenthin (pronounced "molk-in-tine") Office: C 234, 860-892-5712 Email: kmolkenthin@trcc.commnet.edu Office Hours: Mondays 11:00 am - 12:00 pm Wednesdays 11:00 am - 12:00 pm Thursdays 12:30 pm – 1:30 pm 11:30 am - 12:30 pm Fridays and by appointment. \*\*\*\*\*\* \*\*\*\*\*\*\*

## **REQUIRED MATERIAL:**

- Beginning Algebra, 5<sup>th</sup> Edition. Elayn Martin-Gay. Pearson Prentice Hall, 2009. ISBN # 978-0-13-600702-9 (also, ISBN # 0-13-600702-3)
- Access code for MyLab.
- Scientific calculator (must have "e" and "In" button)
- **CALCULATORS**: Calculators will be needed for many homework problems and it is REQUIRED that you bring one to <u>every class</u> and <u>each exam</u>. Cell phones may **NOT** be used as calculators.
- **COMPUTERS**: Online homework will be assigned regularly and will be completed using MyLab and Mastering at <a href="http://pearsonmylab.com">http://pearsonmylab.com</a>. If you did not purchase a book which has an access code bundled with it, you will have to purchase an access code separately. To register with MyLab, you will need the following information:

Course name: Elementary Algebra - MAT 095 Fall 2011

## Course ID: molkenthin08458

Go to the above website and click on the tab *Student* under "Register". Enter the course ID (see above) under "Enroll in a New Course" then click on *Continue*. If you do not have an access code, you can purchase one now with a credit card by clicking on *Pay with a credit card or PayPal* under Enrollment Options. If you have an access code (inside the cover of a new textbook purchased from the bookstore), you are ready to register, so click *Use an access code* under Enrollment Options. Enter your six word access code when prompted, click *Next*, and follow the prompts to create your own login name and password. **Be sure to remember/record your user name and password. Forgetting your user name and/or password is NOT a valid reason for not completing assignments.** After you have registered, return to the above website and you can now log in. Go to the *Welcome Page*, click on your course, and then choose the *Installation Wizard* link to make sure your computer has the required set-up and plug-ins. **Technical support** for the company is at 1-800-677-6337, Monday through Friday, 9 am – 6 pm.

grading:	4 One-Hour Exams: Final Exam (cumulative): Weekly Quizzes: MyLab Attendance and Participation:	400 points (100 each) 150 points 100 points (10 each) 100 points 50 points
	Total:	800 points

Your final grade is the total number of points you have received divided by the total possible number of points. Final grades will be determined using the scale below:

$\textbf{A} \rightarrow 93\%$ and above	<b>A-</b> → 90 - 92%	
<b>B+</b> → 87 - 89%	$\mathbf{B}  ightarrow 83$ - 86%	<b>B-</b> → 80 - 82%
$C+ \rightarrow 77$ - 79%	$\mathbf{C}  ightarrow 73$ - 76%	<b>C-</b> → 70 - 72%
$D+ \rightarrow 67 - 69\%$	$D \to 63 - 66\%$	$D- \rightarrow 60-62\%$

\*\*Please note: A letter grade of C or higher is required to advance to MAT\*K137. A letter grade of C- will **not** meet this requirement.\*\*

EXTRA CREDIT: There will be no "extra credit" assignments for this course.

- ATTENDANCE: Attendance is required and will be taken for each class. An absence is excused ONLY for valid reasons (to be determined by the instructor) and if notification is given **PRIOR** to a missed class (via email or phone message **not** word of mouth from another student). \*\*\*<u>Also, if you miss a class it is</u> **YOUR** responsibility to get the class notes from another student and **BE PREPARED** for the next class meeting (this includes taking the scheduled guizzes).\*\*\*
- **CLASS CANCELATION:** In the unlikely event that a class needs to be canceled by the instructor, you will be notified by the instructor via email at least one hour prior to the class meeting on the day of the class cancelation.
- **HOMEWORK AND QUIZZES:** Homework (both from the text and online) will be assigned on a regular basis. It is expected that you complete the online assigned problems by the due date on the assignment, and the homework in the text by the next class meeting. Your weekly quizzes will be testing the concepts emphasized from class that week and these homework assignments. We will have at least 12 quizzes throughout the semester. I will count your top 10 scores. Make-ups for missed quizzes will be given only in **EXTREME** circumstances and if arrangements are made **PRIOR** to the missed quiz. Any make-up quiz MUST be completed before the next class meeting following the missed quiz. Extensions on MyLab assignments will be given in **EXTREME** situations. Students will be allowed no more than four MyLab extensions. Extensions on MyLab may not extend beyond the date of the exam containing the particular assignment for which the extension is being requested.

Our expectation is that you are spending 2-3 hours of reading and doing homework for this class for every one hour we meet in class. So, you should expect to spend *at least* 6-9 hours per week on this class (outside of class meetings), every week!

EXAMS: You will have four in-class exams and one final exam. Exams are scheduled for the following dates: Exam 1: Friday 9/23/11, Exam 2: Friday 10/14/11, Exam 3: Friday 10/28/11, Exam 4: Friday 12/2/11, Final Exam: Part 1: Wednesday 12/14/11, Part 2: Friday 12/16/11. This may change (but hopefully not), depending on how we are doing. Make-ups for exams will be given only in EXTREME circumstances and if PREVIOUS arrangements are made. No exam will be administered prior to the date/time of the scheduled exam and if you miss an exam, you will receive a grade of 0 (zero). **RETENTION OF PAPERS:** Students are expected to retain all graded work until final grades are received.

- ACADEMIC DISHONESTY: Academic integrity is essential in all aspects of college coursework and learning. I have zero tolerance for academic dishonesty. It is expected that **YOU** complete all your assigned homework/labs. Communication or collaboration of ANY sort is ABSOLUTEY PROHIBITED during any quiz or exam. Academic Misconduct is punishable in a number of ways, including a score of a zero on the assignment where the cheating took place, a grade of an F in the course and/or possible censure on your permanent record. All cases of academic dishonesty will be referred to the Academic Honor Council. Do not let yourself come under the suspicion of academic dishonesty.
- **COURSE OBJECTIVES**: This course review basic mathematical concepts and introduces elementary algebraic concepts and techniques. It is an extension of the basic algebra skills acquired in MAT\* K075. The topics include signed numbers, solving first-degree equations, exponents, polynomials, and factoring, graphing, systems of linear equations, inequalities, radicals, and scientific notation. This course does not count towards the minimum requirements for graduation.

## **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

- ACCOMMODATIONS: Students with learning disabilities should contact the Learning Specialist, Chris Scarborough at 860-892-5751 or <u>cscarborough@trcc.commnet.edu</u> as soon as possible to ensure timely accommodations. Students with physical disabilities should contact Judy Hilburger at 860-383-5420 or via email at <u>jhilburger@trcc.commnet.edu</u> or Matt Liscum at 860-383-5420 or via email at <u>mliscum@trcc.commnet.edu</u> to facilitate accommodations. All testing/quizzing accommodations MUST be discussed with the instructor in a timely manner, that is, *at least* one to two class meetings prior to any scheduled test/quiz for which accommodations are needed.
- **CELL PHONE POLICY**: All cell phones must be turned OFF or MUTED before entering the classroom and properly placed in a bag or pocket (not left on a desk). Any cell phone ringing or beeping during a class is inappropriate and unacceptable. **Texting during class is also inappropriate and will not be tolerated**. Students found texting in class will be asked to leave and will lose their attendance points for that class period.
- **ACCEPTANCE POLICY**: After reading this syllabus, choosing to stay registered for this course exemplifies your acceptance of the syllabus and all policies and consequences outlined in the syllabus, If you do not agree with any of the terms in the syllabus, you are free to withdraw immediately and you have up through September 1, 2011, to register for another section.

\*\*The key to success in this course is to attend every class and do all the homework when it is assigned. Ask questions when you have them, either in class or in my office. You will find it much easier to learn the new topics if you consistently keep up with the course material and homework problems!\*\*

TENTATIVE SYLLABUS		MAT K095 - FALL 2011
Week of:	<u>Chapter(s)</u> :	Topics Covered:
8/26	1.2	Course Introduction, Symbols and Sets of Numbers
8/29	1.4 – 1.8	Variable Expressions and Equations, Adding, Subtracting, Multiplying and Dividing Real Numbers, Properties of Real Numbers, <b>Quiz #1 – Friday 9/2</b>
9/5	2.1 – 2.4	*** <b>No classes Monday 9/5 – Labor Day</b> *** Simplifying Expressions, Addition and Multiplication Property of Equality, Solving Linear Equations, <b>Quiz #2 – Friday 9/9</b>
9/12	2.5 – 2.8	Problem Solving, Quiz #3 – Friday 9/16
9/19	2.9	Solving Linear Inequalities, Catch-up, Quiz #4 – Wednesday 9/21, Exam #1 – Chapters 1 & 2, Friday 9/23
9/26	3.1 – 3.4	Rectangular Coordinate System, Graphing Linear Equations, Intercepts, Slope and Rate of Change <b>Quiz #5 – Friday 9/30</b>
10/3	3.4, 3.5	Slop and Rate of Change, Equations of Lines, <b>Quiz #6 – Friday 10/7</b>
10/10	3.6	Functions, Catch-up, <b>Quiz #7 – Wednesday 10/12</b> Exam #2 – Chapter 3, Friday 10/14
10/17	4.1 – 4.3	Solving Systems of Linear Equations by Graphing, Substitution and Addition, <b>Quiz #8 – Friday 9/21</b>
10/24	4.4	Systems of Linear Equations and Problem Solving, Catch-up, <b>Quiz #9 – Wednesday 10/26, Exam #3 – Chapter 4, Friday, 10/28</b>
10/31	5.1 – 5.3	Exponents, Adding and Subtracting Polynomials, Multiplying Polynomials, <b>Quiz #10 – Friday 11/4</b>
11/7	5.4, 5.5, 6.1	Special Products, Negative Exponents, Scientific Notation, Factoring Polynomials, Quiz #11 – Friday 11/11
11/14	6.2, 6.3, 6.5	Factoring Trinomials and Factoring Binomials, <b>Quiz #12 – Friday 11/18</b>
11/21	6.6	Solving Quadratic Equations by Factoring **Supplementary Session – Wednesday 11/23** **No classes Thursday 11/24 & Friday 11/25 – Happy Thanksgiving!!!**
11/28	6.7	Quadratic Equations and Problem Solving, Catch-up, Review, <b>Quiz #13 – Wednesday 11/30</b> Exam #4 – Chapters 5 & 6, Friday 12/2
12/5		Catch-up, Review
12/12		Final Exam - Part 1, Wednesday 12/14, Part 2, Friday 12/16

\*\*\*The instructor has the right to change/modify this syllabus at any time with proper notification to the class\*\*\*