10321 T14 MWF 1:00 pm – 1:50 pm D 122

INSTRUCTOR: Dr. Kelly Molkenthin (pronounced "molk-in-tine") Office: C 234, 860-892-5712 Email: kmolkenthin@trcc.commnet.edu ****** Office Hours: Tuesdays 12:30 - 1:30 pm Wednesdays 9:00 – 9:50 am Thursdays 10:00 - 10:50 am Fridays 12:00 - 12:50 pm and by appointment.

REQUIRED MATERIAL:

- *Beginning Algebra, 5th 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 http://pearsonmylab.com. 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: MAT 095 - Beginning Algebra Spring 2012

Course ID: molkenthin40789

Go to the above website and click on the tab *Student* under "Register". If you already have a Pearson account (you've used MyLab or Course Compass before), enter your user name and password and click "*Sign In*". If you do not yet have a Pearson account, click on "*create*" under "Create a Pearson Account". **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.** 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), you are ready to register, so click "*access code*" under "Select an Option". Enter your six word access code when prompted, click *Next*, and follow the prompts to create your own login name and password. 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:

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

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, phone message – **not** word of mouth from another student). All absences reported by phone must be followed up with an email. Oversleeping and "colds" are examples that are **not** valid reasons for an absence.

<u>Also, if you miss a class it is **YOUR** responsibility to get the class notes from another student (refer to your class list) and **BE PREPARED** for the next class meeting (this includes taking the scheduled guizzes).</u>

Note: class BEGINS at 1:00 pm. It is expected that you will be in your seat and ready to go at 1:00 pm. Excessive "lateness" will not be tolerated. It is disruptive to both the instructor and the class.

- **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 as soon as possible 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 for every section we cover in the text. 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.

<u>For the online homework</u>: For most assignments, you will be given one week from the date assigned to complete your online assignment for full credit. Once due dates have passed, most assignments will remain open for one additional week. This will give you the opportunity to complete any missed problems for ½ credit. **Note: Deadlines for online homework will not go beyond the exam date for the exam that covers that material. This means for some sections you may not have a complete week to complete the assignment, or may not have the additional week to receive the ½ credit. All online assignments MUST be completed prior to taking the exam on that material. Watch your MyLab carefully. All assignments are due by 11:00 am on due dates.

<u>For text homework</u>: Keep a separate notebook for your text homework. It is expected homework form your text is completed, or at least reasonably attempted, by the class meeting after it was assigned. BE SURE TO CHECK YOUR ANSWERS IN THE BACK OF THE TEXT. If you check the problem in the back of the text and it is not correct, re-do the problem. If you are struggling with the assignment, you need to seek out help either from your instructor or the tutor center ASAP!

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, every week!

Your in-class quizzes will be testing the concepts emphasized from class that week and your homework assignments. Make-ups for quizzes will be given in <u>extreme situations</u> and if arrangements are made with the instructor **prior** to the class meeting in which the quiz takes place. If you miss a class in which a quiz in given, DO NOT assume you will automatically be able to make up the quiz, it must be approved by the instructor. All make-ups must be completed before the next class meeting after the given quiz. Make-ups for quizzes will not be given if the absence on the quiz date is not an excused absence. You will be given 13 quizzes throughout the semester, only your top 10 scores will count toward your final grade.

EXAMS: You will have four in-class exams and one final exam. Exams are scheduled for the following dates: Exam 1: Friday 2/17/12, Exam 2: Wednesday 3/28/12, Exam 3: Friday 4/13/12, Exam 4: Wednesday 5/9/12, Final Exam: Part 1: Monday 5/14/12, Part 2: Wednesday 5/16/12. 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. Any cell phone use, especially texting, during class is also inappropriate and will not be tolerated. Students found using cell phones in any way in class will be asked to leave and will lose their attendance points for that class period. Cell phones may NOT be used for calculators in class.
- 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 February 1, 2012, 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!

Week of:	Chapter(s):	Topics Covered:
1/20	1.2	Course Introduction, Symbols and Sets of Numbers
1/23	1.4 – 1.7	Variable Expressions and Equations, Adding, Subtracting, Multiplying and Dividing Real Numbers, Quiz #1 – Friday 1/27
1/30	1.8, 2.1 – 2.4	Properties of Real Numbers, Simplifying Expressions, Addition and Multiplication Property of Equality, Solving Linear Equations, Quiz #2 – Friday 2/3
2/6	2.5 – 2.8	Problem Solving, Quiz #3 – Friday 2/10
2/13	2.9	Solving Linear Inequalities, Catch-up, Quiz #4 – Wednesday 2/15, Exam #1 – Chapters 1 & 2, Friday 2/17
2/20	3.1	No classes Monday 2/20 – President's Day Rectangular Coordinate System, Quiz #5– Wednesday 2/22 No MAT 095 Friday 2/24 – Instructor out of town
2/27	3.2, 3.3	No MAT 095 Monday 2/27 – Instructor out of town Graphing Linear Equations, Intercepts, Quiz #6 – Friday 3/2
3/5	3.4	, Slope and Rate of Change, Quiz #7 – Wednesday 3/7 No MAT 095 Friday 3/9 – Instructor out of town
3/12	3.5, 3.6	No MAT 095 Monday 3/12 Instructor out of town Equations of Lines, Functions, Catch-up Quiz #8 – Friday 3/16
3/19		No classes 3/19 – 3/25 – Spring Break
3/26	4.1	Review Exam #2 – Chapter 3, Wednesday 3/28 Solving Systems of Linear Equations by Graphing
4/2	4.2, 4.3	Solving Systems of Linear Equations by Substitution and Addition, Quiz #9 – Wednesday 4/4 No classes Friday 4/6 – Spring Recess
4/9	4.4	Systems of Linear Equations and Problem Solving, Catch-up, Quiz #10 – Wednesday 4/11, Exam #3 – Chapter 4, Friday, 4/13
4/16	5.1 – 5.4	Exponents, Adding and Subtracting Polynomials, Multiplying Polynomials, Special Products, Quiz #11 – Friday 4/20
4/23	5.5, 6.1, 6.2	Negative Exponents, Scientific Notation, Factoring Polynomials, Quiz #12 – Friday 4/27
4/30	6.3, 6.5, 6.6, 6.7	Factoring Trinomials, Factoring Binomials, Solving Quadratic Equations by Factoring Quiz #13 – Friday 5/4
5/7		Catch-up Exam #4 – Chapters 5 & 6, Wednesday 5/9 Review
5/14		Final Exam - Part 1, Monday 5/14, Part 2, Wednesday 5/16
	The instructor has the pro	right to change/modify this syllabus at any time with oper notification to the class