

Syllabus College Algebra
Three Rivers Community College
MAT 172_Spring 2016 (CRN) 13177
Tues Thurs 2:30-3:45 Room D109

Instructor:

June Decker jdecker@trcc.commnet.edu
Office: C124 Phone: 860-215-9420
Office Hours: Wed 4:00-4:50, Tues 12-12:45, Thurs 9-10 in office Room C124
I am available to meet in person during office hours or by appointment.

Text: the text is to be found under the "MULTIMEDIA" link on the software package called MyMathLab. The only required purchase for the course is an access code to MyMathLab which includes an interactive copy of the textbook: College Algebra 4th edition by Beecher Penna and Bittenger. You are required to read chapters 1-6 of the text and/or watch the accompanying lecture videos, but you do not need to purchase an additional hard copy of the text. After each section, you will do homework problems on MyMathLab. Note: MyMathLab goes by other names and are all equivalent: MyStatLab, PearsonMyLab and Mastering, CourseCompass. The cost for a student access is \$97 from the MyMathLab website. An access code is also available for purchase at the school bookstore, and may be packaged free with some hard copies of the text. IF you have an unused MyMathLab access code from another course or math text, you can use it for this course. Everyone can sign up for the free financial aid 2 week trial period when you get to the screen that asks you to pay or enter a code, look to the bottom for financial aid grace period.

When you sign up for mymathlab.com, you will be asked to enter a **COURSE ID**
Decker13058

Calculator: You will need some calculating and graphing device. You may use calculator apps for your ipods or laptops. The most often used calculator is the TI 89 or 84. You may use the free apps for androids for TI calculator (I used WabbitMu) . For I-phones, try out DESMOS. Instead of a calculator you may use any of the free math programs downloadable from the web. Two free computer algebra systems are Wolfram Alpha and Microsoft Mathematics available at www.microsoft.com/mathematics . Though you don't need a computer algebra system for this course, you will want to become familiar with one.

COURSE OBJECTIVES: This course is a thorough and rigorous algebra course that strengthens the proficiency

with algebraic skills and the conceptual understanding needed to be successful in the Calculus sequence. The topics include: sets, polynomial, exponential, logarithmic and rational functions, rational exponents, conic sections, right triangle trigonometry, matrices, polynomial, exponential, logarithmic and radical equations, linear and quadratic inequalities, absolute value equations and inequalities, linear and nonlinear systems.

Upon Completion of the course, the student should be able to:

- 1) Define absolute value, find distances on the number line and the coordinate plane.
- 2) Simplify expressions with rational exponents, write them in radical form, simplify, combine and rationalize radical expressions.
- 3) Solve linear and quadratic inequalities, absolute value equations and inequalities, express answers in interval form.
- 4) Perform operations on complex numbers, conjugates, represent complex numbers graphically.
- 5) Perform operations on radical expressions, rational exponents, solve radical equations.
- 6) Find the domain and range of functions, combine functions, identify even and odd functions, graph piece-wise functions, find composition of functions, inverse and transforms of functions.
- 7) Find the characteristics of polynomial functions, solve polynomial equations, find zeros (roots) and x-intercepts of polynomials, apply the Fundamental Theorem of Algebra, The Remainder Theorem, The Factor Theorem, analyze end behavior.
- 8) Graph rational functions, find vertical, horizontal and slant asymptotes.
- 9) Graph exponential and logarithmic functions, use properties of exponents and logarithms, solve exponential and logarithmic equations.
- 10) Solve systems of linear equations in several variables, use matrices, determinants.
- 11) Write equations of circles and parabolas, and graph.
- 12) Solve nonlinear systems of equations.
- 13) Apply right triangle trigonometry.

Tutoring at TASC: You may sign up for a regular free tutor session in the tutor center in Room C117 by the library. Appointments fill up quickly, so call the tutor desk is 860-215-9082, as soon as you think you might want to engage a tutor on a regular basis. Walk in tutoring is on a space available basis.

Grading Policy:

Homework, in class exercises, problem sets, chapter tests,

The points you earn will be converted to a letter grade are as follows:

A : 915-1000 point = 91.5% to 10%	A-: 895-914 points = 89.5% to 91.4%
B+ : 865-894 points = 86.5% to 89.4%	B : 815-864 etc.....
B- : 795-814	C+ : 765-794
C : 715-764	C- : 695 -714
D+ : 665-694	D : 615-664
D- : 595-614	F : 0 - 594

Digication and General Education:

Each student has a subscription to DIGICATION, an electronic portfolio, that is active forever. As part of your general education requirements, you will upload your work from one of the class assignments (a discussion question or the semester project) onto DIGICATION for me to grade. More information and guidance will occur when the time comes.

College Withdrawal Policy and the N (no show) grade:

You may withdraw from this class any time up to and including May 12, and you will receive a W grade on your transcript. However, you must complete a withdrawal form in the Registrar’s Office at the time of withdrawal; if you merely stop attending classes before April 10, you will receive a grade of “N” which means “no show”. Financial aid students MAY have to reimburse the college for courses in which they have an N. If you do not take the final exam, you will receive a grade of F, regardless of the other work you do. No one’s signature other than your own is required on the Withdrawal form. However, I strongly suggest you discuss your withdrawal with me before you submit the forms so that we can discuss your status and your options. Financial aid students should also discuss withdrawal from a course with a financial aid counselor so that you know the monetary ramifications.

Disabilities Statement:

If you have a hidden or visible disability that may require classroom or test-taking modifications, please see me as soon as possible so arrangements can be made. If you have not already done so, please contact the Learning Specialist, Chris Scarborough, at 860-892-5751 to obtain the proper accommodation credentials.

Academic Integrity:

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. Collaboration is encouraged on many assignments such as seminar assignments and homework. .

Any test or exam is considered individual work and must be completed without assistance of any kind. All test material is to be turned in with the test paper. Attempting to bring work out of the testing area and/or share that work with other students is consider cheating. Cheating on tests, misrepresentation of attendance, falsifying records, or lying will result in loss of credit for all work involved.

I encourage you to collaborate on homework, take-home problems, projects, etc. However, you must understand what you hand in to me. I may verify that you have learned the material covered by the work you have handed in by asking you to explain your work. I may give you a 0 on any work you hand in or any answers you put in MyMathLab that you do not understand or cannot explain.

A full copy of the college's academic integrity policy is in the school's catalog and in the student handbook.

Emergency Closings or class cancellations

If the college administrators issue an emergency school closing, you can receive immediate notifications if you go to My.Commmnet.edu and register for the mycommnet.ALERT. You will then receive phone or text messages as soon as a closing is announced. The Alert is more reliable than my email, since sometimes I lose internet service during a storm. If I am going to cancel office or class hours while school is in session, I will email everyone using MyStatLab if I can.

Due on Tuesday,

Log in to MyMathLab.com and read or watch video lecture on section 1.1 under multimedia library (or Chapter contents), take notes, do Homework Orientation and Section 1.1. In class on Tuesday, we will spend only 12 minutes going over homework from section 1.1.

Read or watch video for sections 1.2 and 1.3, take notes for in-class quiz on reading. In class on Tuesday, we will go over any questions on 1.2 and 1.3 that you have.

Section 1.1 problems from text: # 9, 13, 19, 21, 27, 31, 37, 43, 45, 49, 55, 57, 61, 65, 69, 73, 75, 77, 83, 85, 89, 99, 103, 105, 109