Math 137 – T15 Syllabus, Fall 2011
Three Rivers Community College

Course: Intermediate Algebra - MAT* K137 T15
CRN: 31803
Time: TR; 4:00-5:15 p.m.
Location: D109

Instructor: Albert Navetta
E-mail: navetta.a@gmail.com
Office Hours: Tuesday and Thursday 7:45 pm – 8:30 pm D205, and by appointment.

Text: Intermediate Algebra, 4th Edition, by Jay Lehmann

Course Description: This course continues the development of algebraic skills and concepts. The topics include linear equations, functions and graphs, applications of systems of equations, inequalities, rational expressions and equations, operations on radicals and rational exponents, quadratic equations, exponential and logarithmic functions.

Method of Evaluation:

Exams (3)	60% (20% each)
Homework/quizzes	10%
Final Exam	30%

Grade Scale:

Numeric Score	**Grade**
94-100	A
90-93	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
60-62	D-
Below 60	F

No Make-ups: There will be no make-up exams except under extenuating circumstances with arrangements made prior to the exam.

Attendance: Attendance will be taken each class. Regular attendance is expected and will be a factor in evaluating student performance.

Withdrawal Policy: Students may withdraw for any reason through December 9. Withdrawal must be in writing at the registrar's office. Withdrawals after December 9 will not be accepted.

Cell Phones: Cell phones and other electronic devices must be turned off and stowed during class. Cell phones may not be used as calculators. Cell phones left out or on during exams will be considered a violation of academic integrity and will result in an exam grade of 0.

Calculators: Graphing calculators such as the TI 83/84 are required. I will be using the TI 84, which is essentially equivalent to the TI 83 for the purposes of this class. Most other graphing calculators are acceptable.

Topics Covered: The following topics will be covered. As time permits, we will cover other sections.

Section(s)	Topic(s)
1.6	Functions
2.1 - 2.3	Modeling With Linear Functions.
3.2 - 3.4	Systems of Linear Equations
Trig Handout	Right Triangle Trigonometry
4.1 - 4.5	Exponential Functions
5.2 - 5.6	Logarithmic Functions
6.1 - 6.6	Polynomial Functions
7.2 - 7.8	Quadratic Functions
9.1 – 9.3, 9.5	Radical Functions

Course Schedule: Course schedule will be kept on Blackboard VISTA calendar.

Blackboard Vista / Mymathlab: All assignments and grades will be posted on Blackboard VISTA. Additionally, some course content, graph paper templates, handouts, will also be posted. It is recommended that you register for mymathlab. Use course id navetta35978.

Homework: All homework is to be completed and kept in an organized notebook or folder. Homework will be assigned each week and will be posted on Blackboard Vista. Some homework will be turned in for grading so be ready to turn in all assignments on time.

Support Services/Resources:

1. Your text is your primary resource. Read it carefully and do all example problems in the chapters.
2. My office hours.
3. Tutoring and academic success center (TASC). Sign up a tutor or drop in as needed to the tutoring center located in C-117 (860-885-2311). TASC services are free.
4. Course is set up at www.mymathlab.com. Use course ID navetta35978. This is a very good source for homework help. With your registration you also have access to live homework help. If you do not register, limited help is available free at http://interactmath.com/home.aspx (select text from list)
5. Peer study groups can be very effective resources.

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. 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.

Disabled Students and Learning Disabilities Support: If you are a student with a disability and believe your will need accommodations for this class, it is your responsibility to contact the Disabilities Counseling Services at 383-5240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Disabilities Counselor. Your cooperation is appreciated.

Inclement Weather: In the event a decision is made to cancel or delay classes or to close school completely, this decision will be communicated in the following ways:

- The College's main phone number or website 860-886-0177 or www.trcc.commnet.edu)
- Radio and television announcements

Class Cancellation: If class is to be canceled when the school is not closing, I will post the cancellation on Blackboard VISTA.

MAT137 Course Outcomes

1. Factor an algebraic expression using a combination of greatest common factor, difference of two squares, sum or difference of two cubes, factoring by grouping, and/or trinomial factoring .
2. Use factoring procedures to solve equations and problems.
3. Solve compound linear inequalities of the form $c < ax + b < d$. Express answer algebraically, graphically, and using interval notation.
4. Isolate a particular variable in a literal equation.
5. Use quadratic formula to find exact values of a quadratic equation with irrational or imaginary solutions. Approximate the irrational solutions.
6. Solve basic exponential and logarithmic equations.
7. Evaluate basic logarithmic expressions, and convert between logarithmic and exponential form.
8. Solve an exponential equation that requires the use of logarithms.
9. Graph a quadratic function by finding the vertex, x- and y-intercepts.
10. Relate the discriminant in the quadratic formula to the graph of a parabola.
11. Graph a basic exponential or logarithmic function.
12. Know the graphical relationship between exponential and logarithmic functions.
13. Express the slope as a rate of change using appropriate units.
14. Write the equation of a linear function given data. Use functional notation in the answer.
15. Write the equation of an exponential function given data. Use functional notation in the answer.
16. Solve a 2 x 2 and 3 x 3 system of equations.
17. State the domain of linear, quadratic, exponential and logarithmic functions.
18. Evaluate functions using numerical and algebraic values.
19. Identify domain (inputs) and range (outputs) graphically for basic functions.
20. Interpret functional notation in a variety of application problems.
21. Determine if a relation is a function by looking at a graph, table, or equation.
22. Solve a rational equation and check for extraneous solutions.
23. Solve a radical equation that produces a second-degree equation. Check for extraneous solutions.
24. Know and apply the rules of integer and fractional exponents
25. Add, subtract, multiply, divide rational expressions. Reduce the answers.
26. Simplify a complex fraction.
27. Know the meaning of rational exponents and their relationship to radical form.
28. Simplify radical expressions with emphasis on cube roots and lower.
29. Rewrite radical expressions by rationalizing numerator or denominator.
30. Add, subtract, multiply, and divide radical expressions.
31. Solve application problems involving the Pythagorean Theorem.
32. Given a quadratic model, find and interpret the maximum or minimum values, and the intercepts.
33. Solve an application problem involving quadratic equations.
34. Solve an application problem that involves rational expressions.
35. Solve an application problem involving a given exponential or logarithmic model.
36. Solve applications involving linear systems.
37. Find the six trigonometric values of an acute angle
38. Solve triangles using right triangle trig, distinguish between the angle of depression and elevation.
39. Solve applied problems using right triangle trigonometry