Math 137 Syllabus for Fall 2008
Three Rivers Community College

Course: Intermediate Algebra MAT* K137 M09 **CRN:** 30174

Prerequisites: Math 095 with a grade of C or better OR Acceptable Placement Score

Instructor: John Wengertsman
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Office Hours: Monday 3:30 to 4:30, Tuesday and Thursday 12:30 to 1:30

Text: Intermediate Algebra A Graphing Approach 4th Edition
by K. Elayn Martin-Gay and Margaret Greene

Meeting Times: Tuesday and Thursday from 9:30-10:45am
Room #: MOH 300

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

Course Objectives: The objective of this course is to enable the student to understand and to work with, interrelate, and apply algebra governing: solutions of linear equations and inequalities, functions, solutions of systems of equations, rational expressions and equations, radical expressions and equations, solutions of quadratic equations, exponential and logarithmic functions. The student will also develop a basic understanding of Right Triangle Trigonometry.

Attendance: For the learning process to be effective, you are expected to attend each class regularly, to arrive on time, and to take exams on their assigned dates. If you miss a class, you are still responsible for the material covered, homework assigned, and any announcements. If you will be missing a class for an appropriate reason, please call or email me as soon as possible.

Withdrawal Policy: Students may withdraw, in writing at the Registrar's Office, for any reason up through Monday, December 15. No withdrawals will be accepted after Monday, December 15.

Homework: I expect all homework assignments to be completed and kept in an organized notebook or folder. Homework is assigned at each class meeting.

Course Evaluation: There will be three tests (worth 23% each) and a cumulative final exam (worth 31%). You must come to class to take these tests. **In general, make-up of a missed test is not allowed.** Exceptions to this rule may be made for extraordinary circumstances (grade may be adjusted). Tests will be announced a week in advance.

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

Support Services: TASC is the college's free tutoring and academic success center. Sign up a tutor or drop in as needed to either the Mohegan (892-5745) or the Thames (885-2311) center located in the library at either campus. Peers and peer study groups are also good resources. Meeting with me is another option available.

Use of Calculators: This course requires the use of a TI83, TI83 Plus, or TI84 graphing calculator.

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. Please see the Three Rivers Community College catalog for the college's Academic Integrity Policy.

Disabilities Statement: Students with disabilities, who require special accommodations and support services, are encouraged to notify Chris Scarborough (892-5751)

Cellular Phones and Beepers: Cellular phones and beepers must be turned off during class. Phones are not to be answered during class. Please see me if extenuating circumstances should arise.

Inclement Weather: To obtain information on delays, changes, or class cancellations due to inclement weather or emergencies call 860 886-0177 or check your email.

Math 137 Course Content

1.5 Solving Linear Equations Algebraically
1.6 An Intro to Problem Solving
1.8 Formulas and Problem Solving

Appendix E - Right Triangle Trigonometry: Applications

2.5 Equations of the Line

3.2 Linear Inequalities
3.3 Compound Inequalities
TEST 1

4.1 Solving Systems of Linear Equations in Two Variables
4.2 Solving Systems of Linear Equations in Three Variables
4.3 Systems of Linear Equations and Problem Solving

5.1 Exponents and Scientific Notation
5.2 More Work with Exponents and Scientific Notation
5.3 Polynomials and Polynomial Functions
5.4 Multiplying Polynomials
5.5 The Greatest Common Factor and Factoring by Grouping
5.6 Factoring Trinomials
5.7 Factoring by Special Products
5.8 Solving Equations by Factoring and Problem Solving
TEST 2

6.1 Rational Functions and Multiplying and Dividing Rational Expressions
6.2 Adding and Subtracting Rational Expressions
6.3 Simplifying Complex Fractions
6.5 Solving Equations Containing Rational Expressions
6.6 Rational Equations and Problem Solving

7.1 Radicals and Radical Functions
7.2 Rational Exponents
7.3 Simplifying Radical Expressions
7.6 Radical Equations and Problem Solving
TEST 3

8.1 Solving Quadratic Equations by Completing the Square
8.2 Solving Quadratic Equations by the Quadratic Formula
8.3 Solving Equations by Using Quadratic Methods
8.5 Quadratic Functions and Their Graphs
8.6 Further Graphing of Quadratic Functions

9.3 Exponential Functions
9.4 Logarithmic Functions
9.5 Properties of Logarithms
9.6 Common Logarithms, Natural Logarithms, and Change of Base
9.7 Exponential and Logarithmic Equations and Applications
FINAL EXAM - CUMULATIVE