Syllabus

Three Rivers Community College
MAT 137 – Intermediate Algebra
Spring 2009

Course Registration Number (CRN) – 10635 Sec. TC7
M, W, F 10:00-10:50 am, Room D212

Instructor:

Roxanne N. Tisch
Office Hours: Monday and Friday, 11:00 am – 12:00 pm, location to be determined
email: rntisch@cox.net
Home Phone: 401 559-3149

Course Description:

A graphing calculator is required. Instructor will use a Texas Instrument calculator (TI83). 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.

Prerequisites:

Prerequisite: Acceptable placement score or MAT* K095 with a "C#" grade or better.

Required Materials:

The required text is Intermediate Algebra: A Graphing Approach, 4th Ed., Elayn Martin-Gay and Margaret (Peg) Greene, Pearson Prentice Hall, 2009.

Attendance:

Attendance in classes is strongly recommended. *I will teach a class only once;* you are responsible for getting the class notes, homework, and any other assignments from another student and completing that work by the next week after any missed class. Also, short unannounced quizzes may be given and they cannot be made up.

Attendance at exams is mandatory. You will be informed of the dates of tests at least one week in advance. Make-up exams may be given *with my prior consent*. If you must miss an exam, please speak with me before the date of the exam so that arrangements can be made.

Grading Policy:

Throughout the semester there will be three 100-point exams and a final exam (100 points). Another possible 200 points will distributed among homework and projects, quizzes, and class participation. 5 points will be deducted for each class that a project is late. The final grade will be determined by adding the total points earned and dividing by six. Letter grade equivalents are listed below:

Grade	Grade Points	Quality Points
A	93-100	4.0
A-	90-92	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D+	67-69	1.3
D	63-66	1.0
D-	60-62	0.7
F	Below 60	0.0

Homework:

All homework will be completed using My Math Lab. The code for this class is "tisch80172". Homework will be assigned each week. I will be checking regularly to make sure you are keeping up with the homework. It is in your best interest to do at least the assigned problems, if not more. The more you do any math, the easier it becomes.

College Withdrawal Policy:

You may withdraw from this class any time up to and including May 11 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 you will be assigned a grade of F*. Any eligibility for refund of tuition is based on the date that the registrar receives the withdrawal.

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 892-5751.

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

Resources:

TASC (the combined Tutoring Center and Writing Center) has relocated to temporary quarters on the new consolidated campus. We are currently located in temporary quarters in Rm. D-115 (the old CAD lab) until the new Tutoring/Writing Center opens in Rm. C-117 (planned for February).

TASC provides free **one-to-one or group tutoring** in math as well as in many other subject areas. TASC also has **textbooks** (both old and current), **videotapes**, and many **handouts** available for student use. Also, TASC's portion of the school's website has many links to other **online resources**; go to the TASC homepage at http://www.trcc.commnet.edu/ed_resources/tasc/index.htm and follow the link to "Online Resources."

One of your greatest resources is each other. I encourage you to get to know your classmates and **exchange contact information**.

Cell Phone Use:

Please turn off the ringer on all cell phones/pagers before the start of each class. If you have a situation where you absolutely must be able to take a call, please notify me before class.

Course Outline:

We will cover the following sections of the text:

Chapter 1 Real Numbers, Algebraic Expressions, and Equations

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

Trigonometry handout

Chapter 2 Graphs and Functions

2.1 Graphing Equations
2.2 Introduction to Functions
2.3 Graphing Linear Functions
2.4 The Slope of a Line
2.5 Equations of Lines

Chapter 3 Equations and Inequalities

3.1 Solving Linear Equations Graphically

3.2 Linear Inequalities and Problem Solving
3.3 Compound Inequalities

Chapter 4 Systems of Linear Equations and Inequalities
4.1Solving 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

Chapter 5 Exponents, Polynomials, and Polynomial Functions
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

Chapter 6 Rational Expressions
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

Chapter 7 Rational Exponents, Radicals, and Complex Numbers
7.1 Radicals and Radical Functions
7.2 Rational Exponents
7.3 Simplifying Radical Expressions
7.5 Rationalizing Denominators and Numerators of Radical Expressions
7.6 Radical Equations and Problem Solving
7.7 Complex Numbers

Chapter 8 Quadratic Equations and Functions
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

Chapter 9 Exponential and Logarithmic 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