

**Syllabus**  
**Three Rivers Community College**  
**MAT 075 – Pre-Algebra**  
**Spring 2012**  
**Course Registration Number (CRN) – 11258**  
**T, Th 1:00 – 2:15 pm, Room D-219**

**Instructor:**

Roxanne N. Tisch  
Office: C-248  
Office Hours: To be announced  
Email: rtisch@trcc.commnet.edu

**Course Description:**

This course focuses on basic arithmetic and pre-algebra skills. Topics include: whole numbers, fractions, decimal numbers, proportions, percents, perimeter, area, volume, signed numbers, algebraic expressions and equations. Skills acquired in this course will be useful in college and everyday life. In addition, many fields of study today require the knowledge of algebra. This course will prepare you for basic algebra.

**Required Materials:**

- ◆ The required text is PreAlgebra 6th Ed., Elayn Martin-Gay, Pearson Prentice Hall (purchasing options will be discussed on the first day of class)
- ◆ Access Kit for MyMathLab software
- ◆ Notebook or binder
- ◆ Pencils

**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 class after any missed class.* Also, short unannounced quizzes may be given and they cannot be made up.

I take attendance at the beginning of class. If you are late, you will not be marked present. If I check a homework assignment at the beginning of class and you are late, you will not receive credit.

**Attendance at exams is mandatory.** You will be informed of the dates of tests at least one week in advance. Make-up tests/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 be distributed among homework, projects, quizzes, other assignments, and class participation. The final grade will be determined by adding the total points earned and dividing by 6. Letter grade equivalents are listed below:

Grade	Percent of Points Earned
A#	93-100
A-#	90-92
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

The prerequisite for moving on to the next course (MAT 095 Elementary Algebra) is a C or better in this course.

## Extra Credit:

There will be no extra credit assignments.

## Contact:

All communication will occur by announcements in MyMathLab or via email. Please make sure that your email addresses in MyMathLab and MyCommNet are accurate. Check your email regularly to be informed of any changes in schedule.

## College Withdrawal Policy:

You may withdraw from this class any time up to and including May 7 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:

1. Visit me during office hours if you have any questions.
2. Use the email instructor button in MyMathLab to ask specific homework questions.
3. One of your greatest resources is each other. I encourage you to get to know your classmates and **exchange contact information**.
4. TASC (the combined Tutoring Center and Writing Center) is located in room C-117. 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.

## Class Conduct:

In addition to the rules and policies previously stated in this syllabus, students are asked to:

- Be respectful of each person,
- Do not use cell phones, beepers, or similar devices during class. Please silence these devices.
- From the TRCC Student Handbook: *"The College has the right and responsibility to take appropriate action when a student's conduct directly and significantly interferes with the College's educational mission and the rights of others to pursue their educational objectives in an environment conducive to learning."* Such action will, at minimum, be the dismissal of the student from the remainder of class that day.

## Course Outcomes:

1. Add, subtract, multiply, divide, raise to powers, compute absolute value, graph on a number line, appropriately use of inequality symbols with signed numbers.
2. Add, subtract, multiply, divide, raise to powers, compute absolute value, graph on a number line, appropriately use of inequality symbols with fractions.
3. Add, subtract, multiply, divide, raise to powers, compute absolute value, graph on a number line, appropriately use of inequality symbols with decimals.
4. Identify proportions.
5. Find equivalent ratios.
6. Solve proportions.
7. Set up and solve application problems using ratio and proportion.
8. Calculate perimeter, area, and volume of basic geometric shapes using appropriate units of measurement.
9. Solve first degree equations in one variable.
10. Solve basic word problems.
11. Use mathematics terminology effectively in writing and speaking.

## **Course Outline:**

We will cover the following sections of the text:

### **Chapter 1 Whole Numbers and Introduction to Algebra**

- 1.7 Exponents and Order of Operations
- 1.8 Introduction to Variables, Algebraic Expressions, and Equations

### **Chapter 2 Integers and Introduction to Solving Equations**

- 2.1 Introduction to Integers
- 2.2 Adding Integers
- 2.3 Subtracting Integers
- 2.4 Multiplying and Dividing Integers
- 2.5 Order of Operations
- 2.6 Solving Equations: The Addition and Multiplication Properties

### **Chapter 3 Solving Equations and Problem Solving**

- 3.1 Simplifying Algebraic Expressions
- 3.2 Solving Equations: Review of the Addition and
- 3.3 Solving Linear Equations in One Variable
- 3.4 Linear Equations in One Variable and Problem Solving

### **Chapter 4 Fractions and Mixed Numbers**

- 4.1 Introduction to Fractions and Mixed Numbers
- 4.2 Factors and Simplest Form
- 4.3 Multiplying and Dividing Fractions
- 4.4 Adding and Subtracting Like Fractions, Least Common
- 4.5 Adding and Subtracting Unlike Fractions
- 4.6 Complex Fractions and Review of Order of Operations
- 4.7 Operations on Mixed Numbers
- 4.8 Solving Equations Containing Fractions

### **Chapter 5 Decimals**

- 5.1 Introduction to Decimals
- 5.2 Adding and Subtracting Decimals
- 5.3 Multiplying Decimals and Circumference of a Circle
- 5.4 Dividing Decimals
- 5.5 Fractions, Decimals, and Order of Operations
- 5.6 Equations Containing Decimals

### **Chapter 6 Ratio, Proportion, and Triangle Applications**

- 6.1 Ratios and Rates
- 6.2 Proportions
- 6.3 Proportions and Problem Solving
- 6.4 Square Roots and the Pythagorean Theorem

## **Chapter 7 Percent**

7.1 Percents, Decimals, and Fractions

7.2 Solving Percent Problems with Equations

7.3 Solving Percent Problems with Proportions

7.4 Application of Percent

7.5 Percent and Problem Solving: Sales Tax, Commission, and Discount

7.6 Percent and Problem Solving: Interest