

# Syllabus

## Course Information

- MAT137 – 10415 Intermediate Algebra
- Wednesday 6:30pm to 9:15pm
- Room Number E221

## Instructor Information

- Office Hours: Monday and Wednesday 4:00pm till 6:00pm (Appointment Only)
- Phone Number: (860)373-0143 (Leave a message)
- Email: Padrick77@gmail.com

## Course Description

This course continues the development of algebraic skill 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.

**Prerequisite:** Acceptable placement score or MAT095 with a C grade or better. A thorough knowledge of basic algebra is needed for this course.

## Required Text

*Intermediate Algebra: A Graphing Approach*, 4<sup>th</sup> edition, Martin-Gay and Greene, 2008 Pearson Education Inc., ISBN 0-13-600733-3 (student edition)

## Supplies

- 3-ring binder with loose-leaf paper
- Writing Utensil (Pencil, Blue or Black Pen)
- A 12" ruler
- A Graphing Calculator
- Access to a computer connected to the internet

## Disabilities Statement

Students with hidden or visible disabilities who may require special accommodations and support services are encouraged to notify the instructor and Chris Scarborough (860) 892-5751, who is coordinating services to students with disabilities, during the first two weeks of class.

## Academic Integrity Policy

Each Student is expected to demonstrate his/her knowledge of the subject matter on each assignment and test. Any student(s) caught cheating on a test will receive a zero for that test and will not be allowed to make-up that test.

## College Withdrawal Policy

May 14<sup>th</sup> Last day to withdraw from class (Withdraw at the Registrar's Office)

## Class Cancellation Policy

If class is canceled by the school, pay attention to radio and TV announcements, call the college's main phone number (860) 886-0177, or visit the college's homepage <http://www.trcc.commnet.edu> .

If class is canceled by the instructor, a notice will be placed on the classroom door. If time permits, students will be notified by email.

## Method of Evaluation

- Participation and Attendance – 15%
  - 1 Point given per day you come to class and participate
- Weekly Quiz - 13 Quizzes will drop lowest 3 – 40%
  - Given at the end of the class based on the work gone over that class
- Test – 2 tests – 20%
  - Given at the beginning of the class (Dates on the Assignment List)
  - Tests can be made-up for one week following the date the test was given if the student was absent the day of the test .
- Final Exam – 25%
  - Final will cover all material gone over this semester. Students that have achieved a 93% or higher during the semester will be exempt from the final exam.

## Grading System

These letter grades and corresponding numerical grades will be used for all assignments and the course grade: 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)

## Assignments

Assignments will be given on a weekly basis. All students are expected to work on assignments regularly and to seek assistance if the problems are not understood. All work should be kept in a notebook which may be reviewed by the instructor at any time.

## Attendance

Students are expected to attend all classes, to arrive for class on time, and to remain for the duration of the class meeting. It is the student's responsibility to request any missed work, assignments, or materials before the next class. Students who are consistently tardy, leave class early, and/or walk in and out of class are a distraction to the instructor and the other students. This results in a disruption of the class and the learning process.

## Rules of Conduct in Class

- Respect each person
- No food or beverages in the classroom
- Electronic devices must be turned off or silenced during class.
- Student Behavior: *“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.”* –from the TRCC Student Handbook. Such action will, at a minimum, be the dismissal of the student from the remainder of the day’s class and any graded work from that day will be graded as a zero.

## Course Objectives

- 1/27     **Objectives** Section 1.5, 1.6, and 1.8
- Review rules of the class and grading policy
  - Solving multiple step linear equations using one-variable
  - Solving formulas for a specified variable
  - Using formulas and linear equations to problem solve
  - Homework
- 2/3     **Objectives** Section 3.2, 3.3, and Trigonometry Worksheet
- Solving linear inequalities including problem solving activities
  - Solving compound inequalities
  - Right Angle Trigonometry Workbook
    - [http://www.trcc.commnet.edu/Prog\\_Study/Mathematics/TrigHandout.pdf](http://www.trcc.commnet.edu/Prog_Study/Mathematics/TrigHandout.pdf)
    - Solving basic right angle trigonometry problems using Sine, Cosine, and Tangent
  - Homework
- 2/10     **Objectives** Section 2.3, 2.4, and 2.5
- Graphing linear equations using intercepts and slope
  - Determining the slope of a line
  - Writing the equation of a line given a variety of information
  - Homework
- 2/17     **Objectives** Section 4.1, 4.2, and 4.3
- Solving systems of linear equations with two and three variables
  - Using Systems of equations to problem solve
  - Homework
- 2/24     **Objectives** Section 5.1, 5.2, 5.3, and 5.4
- §     **Test on Chapter 1 - 4**
- Using exponential rules to simplify and evaluate problems involving exponents and scientific notation
  - Addition, Subtraction, and Multiplication of Polynomials
  - Homework
- 3/3     **Objectives** Section 5.5, 5.6, 5.7, and 5.8
- Factoring using GCF and grouping
  - Factoring Trinomials
  - Solving Equations by factoring
  - Homework

- 3/17      **Objectives** Section 6.1, 6.2, and 6.3
- Addition, Subtraction, Multiplication, and Division of Rational Functions
  - Simplifying Complex Fractions
  - Homework
- 3/24      **Objectives** Section 6.4 and 6.5
- Dividing polynomials using Long Division and Synthetic Division
  - Solving equations and Problem Solving using Rational Equations
  - Homework
- 4/7      **Objectives** Section 7.1, 7.2, and 7.3
- §      Simplifying and Evaluating Radical Functions
- Using the Rules of Rational exponents to simplify expressions
  - Homework
- 4/14      **Objectives** Section 7.4, 7.5, and 7.6
- Addition, Subtraction, Multiplication, and Division of Radical Expressions
  - Problem Solving using Radical Functions
  - Homework
- 4/21      **Objectives** Section 8.1 and 8.2
- §      **Test on Chapter 5-7**
- Solving Quadratic Equations using Completing the Square and Quadratic Formula
  - Homework
- 4/28      **Objectives** Section 8.5 and 8.6
- Graphing Quadratic Functions
  - Using the Standard Form, Vertex Form, and Intercept form to sketch parabolas
  - Homework
- 5/5      **Objectives** Section 9.3, 9.4, 9.5 , 9.6, 9.7
- Evaluating and Graphing Exponential and Logarithmic Functions
  - Using the properties of Logarithms to simplify and evaluate functions
  - Homework
- 5/12      **Objectives** Final Exam Review
- 5/19      **Objectives** **Final Exam**