COURSE TITLE: Math 100 – Intermediate Algebra

COURSE DESCRIPTION: This course provides students with a strong grounding in intermediate algebra. Topics include linear equations and inequalities, graphs and functions, systems of equations and inequalities, polynomials and factoring, rational equations and functions, radicals, quadratic equations and functions, the conics sections, and applications. Prerequisite: Appropriate placement test score or grade of P in Elementary Algebra. Computer assisted including lecture, individual and small group tutoring in Mathematics Computer Laboratory.

COURSE MATERIALS:

1. MyLabsPlus Access Code (required). Access can be purchased in the bookstore or online.
   ISBN: 0558926800
   Note: the Pearson Tech Support number is: 1-800-677-6337
   Log in with user name: your NetID; password: mmddyy (your birthday) – you can change this.

   TO ACCESS COURSE from outside the lab, go to montclair.mylabsplus.com

2. Calculator scientific or graphing (TI-86 or lower) (recommended). Cellphones are prohibited in the center and may not be used as a calculator.

3. Headphones (required) for use in the Red Hawk Mathematics Learning Center.

4. Notebook devoted to the course and pencil/pen (required) – Paper is only provided during a quiz, midterm, or final.

GRADING: In this course you will be evaluated based on your performance on homework, quizzes, midterm, comprehensive final exam, and participation.

A. Homework - 20% of your grade. Homework is completed online during lab time and at home. You will need to spend additional time, approximately 3-6 hours a week, outside of scheduled lab time to meet weekly objectives.

B. Quizzes - 15% of your grade. You will be able to retake any quiz up to 3 times, as long as you complete the attempts before the end of your lab time on the due date. Quizzes are timed, closed notes assignments.

C. Participation - 5% of your grade. Participation grade is based on attendance during your scheduled weekly lab times. Credit will be awarded based on the completion of the check-in and check-out process, but you are expected to actively work on assignments during your lab time. Lack of participation can result in losing attendance credit for the lab period.

D. Focus Group - 5% of your grade. You will be graded on attendance and participation during each focus group session.

E. Midterm - 25% of your grade. There is one midterm in this course. You are allowed one attempt at the midterm which must be completed before the end of your lab time on the due date.

F. Final Exam - 30% of your grade. The final exam is administered in the Red Hawk Mathematics Learning Center during your scheduled time, but may be taken early if completed before your last lab meeting. Date and time can be found on the course site. Only one attempt is allowed.

G. Study Plan - Course Bonus 2% of your grade. Bonus points will be awarded based on completion of the study plan at an 80% mastery level prior to the final. You must achieve 80% of total number of points to earn the bonus.

To earn a C- you must average at least 60% on parts B, E, & F above and average at least 70% overall. (60% for a D-)

LATE WORK: Zeros will be submitted on all assignments after the final deadline. Students will not be given an opportunity to make up late assignments.
REMINDER: The Red Hawk Mathematics Learning Center is a classroom. As a courtesy to all students, cell phones must be turned off or silenced and put away. No visiting with other students. Food and drinks are not allowed. See website for full list of policies.

MATHEMATICS LEARNING CENTER POLICIES

A. Testing and Quizzing
   • You must provide a picture ID to be permitted to take a quiz or a test.
   • Cell phones, additional resources, notes or papers of any kind are not permitted in the testing area. Paper for use while testing and quizzing will be given to you by the proctor. All test paper must be turned into the proctor before leaving the testing area, but keep your quiz papers for review. Calculator use is at the discretion of your instructor.
   • You are not permitted to leave the room without speaking to an instructor. If you leave without permission, you will earn a 0 for tests and quizzes.
   • Cheating will result in a 0 on all attempts of the quiz or test.

B. Use of the Computers
   • Your time at the RHMLC is devoted to your math course work. If caught playing games, sending or reading email, attending to social media sites, or working on other subjects, you will be asked to leave and will not receive attendance credit for your time that day.
   • Note: MyLabsPlus is both PC and Mac compatible and works best with Chrome or Firefox. The computer labs around campus are available for your use outside of lab time.

GETTING HELP - Help is always available, just ask! As you work in the Red Hawk Math Learning Center, several math graduate assistants and tutors will be circulating to give assistance when you need it most. In addition, there will always be an instructor in the lab. Simply place the red cup on your computer monitor to get the attention of a tutor.

ADDITIONAL TUTORING SERVICES:
1. Drop-in hours for the RHMLC are posted on the Center’s website.
2. In addition to drop-in hours, help is available whenever the Center is open. There may be additional computers available for use, on a first come first serve basis.
3. Small group tutoring times are scheduled Monday through Friday at the RHMLC and are posted on the Center’s website/front desk.

ACADEMIC INTEGRITY - You are responsible for your own work. Any attempt to cheat will be a violation of the Code of Conduct and subject to academic penalties. If caught cheating, you will earn a 0 for the assignment and the behavior will be reported to the student conduct office. See the school's academic code for further information on penalties for such misconduct. Two violations of the Code of Conduct will result in a failure of the course.

DISABILITIES RESOURCES - Montclair State University is committed to the full inclusion of students with disabilities in all curricular and co-curricular activities as mandated by Section 504 of the Rehabilitation Act of 1973. The Disability Resource Center (DRC) will assist students in receiving the accommodations and services necessary to equalize access. The DRC provides assistance to students with physical, sensory, learning, psychological, neurological, and chronic medical disabilities. The mission of the DRC is to unite the Montclair State University community in an effort to provide students with disabilities the excellence and equity in education to which they are legally entitled. For further information and assistance, contact the Disability Resource Center in Webster Hall (973-655-5431).

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS) – In addition to the above services, Montclair State is committed to the emotional well-being of the student body. For those suffering from emotional and psychological stresses (depression/testing anxiety/other) please visit http://www.montclair.edu/counseling-and- psychological-services/ for walk in times and services or call 973-655-5211.
COURSE OBJECTIVES

**Linear Equations and Inequalities** - Solving linear equations, linear inequalities and their solutions, solving equations involving absolute value, and solving inequalities involving absolute value

**Graphs and Functions** - The rectangular coordinate system, ordered pairs as solutions to equations in two variables, the distance formula, the midpoint formula, graphs of equations, slope and graphs of linear equations, equations of lines, graphs of linear inequalities, relations and functions, and graphs of functions

**Systems of Equations** - Solving systems of equations in two variables by graphing, substitution, and the method of elimination

**Polynomials and Factoring** - Integer exponents and scientific notation, adding and subtracting polynomials, multiplying polynomials, factoring by grouping and special forms (difference of two squares, sum of two cubes, and difference of two cubes), factoring completely, factoring trinomials, and solving polynomial equations by factoring

**Rational Expressions, Equations, and Functions** - Rational expressions and functions, simplifying rational expressions, multiplying and dividing rational expressions, adding and subtracting rational expressions, complex fractions, dividing polynomials and synthetic division, and solving rational equations

**Radicals** - Roots and radicals, rational exponents, simplifying radical expressions, adding and subtracting radical expressions, multiplying and dividing radical expressions, solving radical equations, and applications

**Quadratic Equations and Functions** - Solving quadratic equations by factoring, completing the square, and the quadratic formula; graphs of quadratic functions

**Conics** - Circles, parabolas, ellipses, and hyperbolas