



# Red Hawk Mathematics Learning Center

## Student Contract

\*\*\*Please read this document carefully and complete orientation assignment.\*\*\*

### **COURSE TITLE:** Math 103 – The Development of Mathematics

**COURSE DESCRIPTION:** A survey of traditional and contemporary mathematical topics developed within a historical framework and designed to develop an appreciation for the role and universality of mathematics as a cultural force in our society. Meets Gen Ed 2002 - Mathematics. Not for majors in College of Science and Mathematics.

### **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: **mmddy (your birthday)** – you can change this.

TO ACCESS COURSE from outside the lab, go to [montclair.mylabsplus.com](http://montclair.mylabsplus.com)

2. **Calculator (required)** scientific (**recommended**). Cellphones and graphing calculators are prohibited in the center.

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 - 15% 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 - 10% 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. Project/Paper – 15% of your grade.** There is one main project in this course, with project check points. More information about the project will be included in the course material.

**F. Unit Tests – 30 % of your grade (15% each)** There are 2 Unit Tests in this course, which are timed and proctored in the Mathematics Learning Center. You will be allowed one (1) attempt at each test during scheduled test dates. ID is required to take any test or quiz.

**G. Final Exam - 20% 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.

**H. Study Plan - Course Bonus 2% of your grade.** Bonus points will be awarded based on completion of 90 mastery points **prior to the final.**

**To earn a C- you must average at least 60% on parts B, F, & G above and at least 70% on all parts for a C- (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, smart watches, 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. Free Math Skills Workshops are scheduled for most Wednesday and Saturday afternoons during the semester. Topics change weekly. To see the schedule and register for a workshop go to:  
<http://www.montclair.edu/csam/red-hawk-math-learning-center/workshops/>
4. Free Individual tutoring times are scheduled Monday through Friday in the RHMLC. To see the schedule and register for a tutoring session visit <http://www.montclair.edu/csam/red-hawk-math-learning-center/form/>
5. Center for Academic Development and Assessment – Webster Hall – Room 117. See CADA website for tutoring hours: <http://www.montclair.edu/student-development-campus-life/center-academic-development-assessment/>

**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. Please note due dates are final unless otherwise noted by the instructor. 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.

**TEXT: Mathematical Ideas, 12<sup>th</sup> edition, Miller, Heeren, and Hornsby**

**Course Outline:** In this course we will cover the following topics:

1. Introduction to Inductive and Deductive reasoning (1.1 and 1.2)
2. Problem Solving (1.3)
3. Set Theory
  - a. Symbols and terminology of Set Theory (2.1)
  - b. Venn Diagrams and Subsets (2.2)
  - c. Set Operations and Cartesian Products (2.3)
  - d. Surveys (2.4)
  - e. Infinite Sets and Their Cardinality (Extension)
4. Logic
  - a. Statements and Quantifiers (3.1)
  - b. Truth Tables and Equivalent Statements (3.2)
  - c. Conditional Statements (3.3 and 3.4)
  - d. Analyzing Arguments with Euler Diagrams (3.5)
5. Historic Numeration Systems (4.1 and 4.2)
6. Geometry
  - a. Definition of terms (9.1)
  - b. Geometric Shapes (9.2)
  - c. Congruent Triangles and Proofs (9.3)
  - d. Perimeter, Surface area, and Volume (9.4 & 9.5)
  - e. Transformational Geometry (9.6)
7. Counting Methods
  - a. Listing Methods (10.1)
  - b. Fundamental Counting Principle (10.2)
  - c. Combination and Permutations (10.3 & 10.4)
  - d. Counting using Set Compliments (10.5)
8. Probability
  - a. Definitions (9.1)
  - b. Properties of probabilities (9.2)
  - c. Conditional Probability (9.4)
  - d. Expected Value (9.5)
9. Graph Theory
  - a. Definitions (9.1)
  - b. Euler and Hamilton Circuits (15.2 & 15.3)