

## General Syllabus for M007 - Fall 2010

**Text:** Elementary and Intermediate Algebra by Elayn Martin-Gay; 4<sup>th</sup> edition  
Pearson Addison-Wesley, copyright 2009.

**Be sure students know that the same textbook is used in M007 and M117.**

**MyMathLab :** An online homework, tutorial, and assessment system. Instructors may choose to require students to complete homework assignments online instead of or as a supplement to traditional homework. An access code will be bundled with new textbooks purchased at the bookstore or can be purchased separately (also available at [www.coursecompass.com](http://www.coursecompass.com))

**Note:** Elementary Algebra is a course for those students who have not had, did not succeed at, or over time have forgotten first year high school algebra. The purpose of this course is to teach or remediate basic algebra concepts of linear and quadratic equations & functions, and polynomial expressions, including factoring with an emphasis on problem solving. The chapters/sections listed below form the minimum syllabus for this course. Students who do not have the prerequisite skills should be identified early and be encouraged to “catch up” by completing review materials in Chapter 1 of the text or transferring to the M005/M007 class.

**Final Exam:** The final exam for all sections of M007 will be provided by the math department with questions chosen to reflect the topics indicated on this syllabus. The Final Review is on the web at <http://homepages.ius.edu/pmiller/>

**Grading:** Individual instructors are free to choose the grading scheme that best fit his/her teaching style. The department requires that the departmental final exam be weighted as at least 25% of the overall grade for the semester. Students who score below 60% on the final exam may not receive a grade higher than a "C" for the course (C+ is not an option). This should be clearly stated on your syllabus. Instructors are responsible for grading the exams for their own class; the completed exams, a summary sheet, and a copy of semester grades must be returned to the math department. The summary sheets are used by the math department to compile summary statistics for our classes. It is important to complete this form correctly. Ask if you need help.

**The sections and topics listed below are to be covered in all sections of M007:**

**Note: \*\*Students that need help with Chapter 1 should enroll in the M005/M007 course if they are not able to review the material on their own. Chapter 1 will NOT be taught in the M007 course.**

Chapter	Sections	Comments
2	1-8	Skip compound inequalities in 2-8. Emphasize let statements and showing all work on application problems
3	1-6	
<b>Skip chapter 4</b>		
5	1-6	Skip scientific notation in 5-5 and division by binomials is optional in 5-6. Skip section 5-7.
6	1-7	

## Syllabus for M007 Elementary Algebra

**Instructor:**

**Time & Location:**

**Office:**

**Voice Mail Number:**

**Office Hours:**

**E-mail:**

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**Prerequisites:** None required.

### **M007 Elementary Algebra Course Objectives:**

By the end of this course, students should be able to:

- Solve first degree equations and inequalities, second degree equations and applications for each of these
- Solve problems and applications involving proportions, percents, geometry and other formulas
- Use the coordinate system and graph linear equations
- Factor and perform operations on polynomials

**Students with Disabilities:** If you have specific physical, psychological or learning disabilities and require accommodations, please let me know early in the semester so that your learning needs may be appropriately met. You will need to provide documentation of your disability to the Coordinator of Disability Services located in University Center South Room 207, 941-2243. Additional information about the Office of Services for Students with Disabilities may be obtained at:  
<http://www.ius.edu/ASC/DisabilityServices/>

**Attendance Policy:** Attendance is a key factor in academic success. Class attendance is required. Illness is usually the only acceptable excuse for absence from class. Other absences must be explained to the satisfaction of the instructor, who will decide whether missed assignments may be made up. A student absent from class bears full responsibility for all material covered in class. *Individual instructors can include particular requirements and/or penalties for absences.*

### **Makeup Policy:**

**Grading Policy:** *In addition to other policies outlined by each instructor:*

The Final Exam is to count at least 25% of the course grade and students who score below 60% on the final exam may not receive a grade higher than a "C" for the course (C+ is not an option).

**Review for Final Exam:** <http://homepages.ius.edu/pmiller/ReviewForFinals.htm>

### **Homework Policy:**

**Studying for the Class:** This is a college class and is much different than one taught in high school. We cover a lot of material and have limited time in class. **You should expect to spend at least two hours studying outside of class for each hour spent in class.** You cannot expect to master the material from just seeing it explained and working in class. An important part of your learning of the material will be the time you spend working out of class.

**Help Outside of Class:**

- **Math Lab:** Location: Physical Sciences, Room 015; 941-2670. Students may walk in and use the facilities at any time (free of charge) without an appointment. Tutor schedule is online at <http://www.ius.edu/mathlab/> and the bulletin board by the lab.
- **Pearson Tutor Center:** Pearson's [Math Tutor Center](#) is staffed by college-level math instructors who can help you with what you're learning by phone, fax, email, or interactive web. Visit the Tutor Center's registration page: <http://www.pearsonutorservices.com/registration.html>
- **Private Tutors:** Please visit the Student Development Center, University Center South, Room 203, to sign-up for a tutor. Most students get a tutor within 24 hours. The cost is \$5.00 per hour (non-refundable) and must be paid for in advance. For more information go to: <http://www.ius.edu/sdc/main/assist1.htm>

**Bad Weather Policy:** When there is bad weather in the area, a decision is made about whether the campus should be closed or open on a delayed schedule as soon as possible. The decision is independent of the decisions of school corporations and the other colleges in the area. Off-campus classes do not meet if campus is closed or if the school building in which they are held is closed.

**Delay Schedule:**

**Monday through Friday classes:**

8 a.m. classes meet from 10 a.m. until 10:55 a.m.  
9:30 a.m. classes meet from 11 a.m. until 11:55 a.m.  
11 a.m. classes meet from 12 noon until 12:55 p.m.  
Other classes meet at regular times.

**Saturday Classes:**

Morning classes meet from 10:30 a.m. until 12 noon.  
Afternoon classes meet at regular times.

**Daily Schedule:** *There is a possible daily schedule below. This is only a suggestion. As long as you cover the sections indicated during the semester, you may structure the organization of the course as you wish.*

<b>Day</b>	<b>Sections</b>	<b>Topics</b>
1	2.1	Simplifying Algebraic Expressions
2	2.2	The Addition and Multiplication Properties of Equality
3	2.3	Solving Linear Equations
4	2.4	An Introduction to Problem Solving
	2.5	Formulas and Problem Solving
5	2.6	Percent and Mixture Problem Solving
	2.7	Further Problem Solving
6	2.8	Solving Linear Inequalities
7	Review	
8	Test – Chapter 2	
9	3.1	Reading Graphs and the Rectangular Coordinate System
	3.2	Graphing Linear Equations
10	3.3	Intercepts
	3.4	Slope and Rate of Change
11	3.5	Equations of Lines
12	3.6	Functions
13	Review	
14	Test – Chapter 3	
15	5.1	Exponents
16	5.2	Polynomial Functions and Adding and Subtracting Polynomials
17	5.3	Multiplying Polynomials
	5.4	Special Products
18	5.5	Negative Exponents
	5.6	Dividing Polynomials
19	Review	
20	Test – Chapter 5	
21	6.1	The Greatest Common Factor and Factoring by Grouping
22	6.2	Factoring Trinomials of the Form $x^2 + bx + c$
23	6.3 and 6.4	Factoring Trinomials of the Form $ax^2 + bx + c$
24	6.5	Factoring Binomials
	6.6	Solving Quadratic Equations by Factoring
25	6.7	Quadratic Equations and Problem Solving
26	Review	
27	Test – Chapter 6	
28	Review for Final Examination	

**Comprehensive Final Examination:** time & date

**Note:** If a student fails the final exam, the maximum course grade possible is a C.