NON-GEN ED COURSE OUTLINE TEMPLATE

ESSEX COUNTY COLLEGE
Mathematics and Physics Division
MTH 092 – Elementary Algebra
Course Outline

Course Number & Name: MTH 092 Elementary Algebra

Credit Hours: 4.5 **Contact Hours:** 4.5 **Lecture:** 4.5 **Lab:** N/A **Other:** N/A

Prerequisites: Grade of "C" or better in MTH 086 or placement

Co-requisites: MTH 092T **Concurrent Courses:** None

Course Outline Revision Date: Fall 2010

Course Description: In this course, algebraic concepts…

Course Goals: Upon successful completion of this course, students should be able to do the following:

1. demonstrate knowledge of…;
2. utilize various problem-solving…; and
3. communicate accurate mathematical terminology and notation in written and/or oral form….

Measurable Course Performance Objectives (MPOs): Upon successful completion of this course, students should specifically be able to do the following:

1. Demonstrate knowledge of… (** matches Course Goal 1 above):
   - 1.1 *simplify…*;
   - 1.2 *translate verbal expressions…*;
   - 1.3 *perform basic operations…*; and
   - 1.4 *factor…*
2. Utilize various problem-solving… (** matches Course Goal 2 above):
   - 2.1 *apply algebraic methods to solve…*
3. Communicate accurate mathematical terminology and notation in written and/or oral form… (** matches Course Goal 3 above):
   - 3.1 *write and explain solution…*

Methods of Instruction: Instruction will consist of….

Outcomes Assessment: All test and exam questions are blueprinted…

Course Requirements: All students are required to:

1. Maintain regular attendance.
2. Complete assigned homework…
3. Take part in class discussions…
4. Take all tests and quizzes…

Methods of Evaluation: Final course grades will be computed as follows:

Grading Components	% of final course grade
• **Homework, quizzes and class participation** A perusal of homework problems and quizzes…	**0 – 20%**
• **2 or more Tests** (dates specified by the instructor) Tests will show evidence of the extent to which students meet course objectives…	**25 – 35%**
• **Midterm Exam** The same objectives apply as with tests, but it is anticipated that students…	**20 – 25%**
• **Final Exam** The **comprehensive** final exam will examine the extent to which students…	**25 – 30%**

NOTE: The instructor will provide specific weights, which lie in the above-given ranges, for each of the grading components at the beginning of the semester. Also, You MUST score at least 70% on the MTH 092 Departmental Final Exam…

Academic Integrity: Dishonesty disrupts the search for truth that is inherent in the learning process and so devalues the purpose and the mission of the College. Academic dishonesty includes, but is not limited to, the following:

- plagiarism – the failure to acknowledge another writer's words or ideas or to give proper credit to sources of information;
- cheating – knowingly obtaining or giving unauthorized information on any test/exam or any other academic assignment;

- interference – any interruption of the academic process that prevents others from the proper engagement in learning or teaching; and
- fraud – any act or instance of willful deceit or trickery.

Violations of academic integrity will be dealt with by imposing appropriate sanctions. Sanctions for acts of academic dishonesty could include the resubmission of an assignment, failure of the test/exam, failure in the course, probation, suspension from the College, and even expulsion from the College.

Student Code of Conduct: All students are expected to conduct themselves as responsible and considerate adults who respect the rights of others. Disruptive behavior will not be tolerated. All students are also expected to attend and be on time for all class meetings. No cell phones or similar electronic devices are permitted in class. Please refer to the Essex County College student handbook, *Lifeline*, for more specific information about the College's Code of Conduct and attendance requirements.

Course Content Outline: based on the text **Introductory Algebra**, 7th edition, by Aufmann, Barker & Lockwood; published by Houghton Mifflin, Boston, MA, 2006; ISBN #: 0-618-50307-2

Class Meeting (80 minutes)	Chapter/Section
	CHAPTER 1 REAL NUMBERS
1	1.2 Addition and Subtraction of Integers
	1.3 Multiplication and Division of Integers
2	1.4 Exponents and the Order of Operations Agreement
	1.6 Addition & Subtraction of Rational Numbers
	1.7 Multiplication & Division of Rational Numbers
	CHAPTER 2 VARIABLE EXPRESSIONS
3	2.1 Evaluating Variable Expressions
	2.2 Simplifying Variable Expressions
…	
11	**Test #1** on Chapters 1, 2, and 3
	CHAPTER 4 POLYNOMIALS
12	4.1 Addition & Subtraction of Polynomials
13	4.2 Multiplication of Monomials
…	
19	Review for the Midterm Exam
20	**Departmental Midterm Exam** on Chapters 1 through 4
	CHAPTER 5 FACTORING
21	5.1 Common Factors and Factoring by Grouping
…	
41	Review for Final Exam
42	Comprehensive **Departmental Final Exam** on all course material covered

MTH 092 – Suggested Homework Problems

TEXT: **Introductory Algebra**, 7th edition, by Aufmann, Barker & Lockwood; published by Houghton Mifflin, Boston, MA, 2006; ISBN #: 0-618-50307-2

Section	Homework page and numbers
1.2	p. 13 # 3,7,11,15,19,21,23,25,27,29,31,42,43,51,55,59,63,67,69,73,75
1.3	p. 22 # 3,7,11,13,15,17,19,20,21,29,31,33,39,41,43,45,47,51,57,62,63,67