

MIDDLESEX

COUNTY COLLEGE

Course Title: Algebra I (Part B)

Course No.: MAT-013B

Class Hours: 4

Laboratory Hours: 0

Credit Hours: 0

Dept. Head Approval: _____
Maria DeLucia, Ph.D.

Date: Fall 2009

Dean Approval: _____
Reginald Luke, Ph.D.

Prerequisite:

Prerequisite(s): MAT 013A or Permission of Mathematics Department Chairman.

Textbook of Course:

Author	Title	Publisher
Miller, O'Neill, Hyde	<u>Beginning Algebra</u>	McGraw-Hill 2 nd Edition

Catalog Course Description:

MAT 013B
Algebra I Part B

This is the second semester of a two semester course in algebra I designed to introduce and develop elementary algebraic concepts. Topics include: techniques of graphing, solving linear systems, polynomials and their operations, special products and factoring, rational expressions and equations, Introduction to Radical Expressions, and solving quadratic equations by factoring.

Grade Requirement:

A "C" is the minimum acceptable grade for completion of the remedial/development level or movement to a credit course.

GRADING POLICY

Tests, Quizzes, Homework	70%
Final Exam	30%

Grades should be assigned as follows:

92% - 100%	A	77% - 78%	C+
89% - 91%	A-	70% - 76%	C
87% - 88%	B+	60% - 69%	D
82% - 86%	B	below 60%	F
79% - 81%	B-		

Tests:

There are 4 tests. Each instructor is responsible to produce his or her own tests.

Quizzes:

It is suggested that quizzes be given frequently. MathZone (on-line) quizzes can be set up for you. You will be given more information about the software during the orientation before the beginning of the semester.

Homework

Homework should be assigned each class meeting and periodically checked. Whether textbook assignments are graded or not, students should be made aware that doing homework is of the utmost importance in order to solidify learned skills and to provide a strong foundation upon which they can learn new material.

Attendance

There is no official attendance policy. However, students should be made aware of how important attendance is for their success. Some instructors build in extra quizzes to encourage good attendance. Whatever you choose, some students will have attendance problems and the issue needs to be addressed.

Final Exam:

The two-hour final exam will be administered during the exam period for all day session classes and during the last class session for all other sessions. The Final Exam is a departmental final for all of MAT 013. **A minimum of 60% on the Final Exam is required to pass the class with a grade of C or better.**

Additional Material:

MathZone, is a powerful Web-based tutorial for homework, quizzing, testing and multimedia instruction. MathZone offers: a) Practice exercises b) Video c) e-Professor and d) NetTutor. Students might have an access code from last semester or they can buy a new one.

Extra Help

Students should be informed where they can get help if they have difficulty with the subject matter. Some suggestions are:

1. If you are a full-time instructor, students should be encouraged to come for help during your office hours.
2. Faculty volunteer and peer tutoring is available in the Johnson Learning Center.
3. Professional tutors are available in the Developmental Mathematics Lab/Tutoring Center in MH 142. In addition to tutoring, students have access to computers on which they will be able to review and practice the skills they have learned in class. They will be able to work on software programs that are aligned with their textbooks. If you would like your class to meet in the lab for an orientation session, contact a lab staff member at x3807.
4. Students should be encouraged to work in study groups. This will be fostered if you allow students to work in groups, at times, during your class sessions especially on review days before a test.

Calculators:

It is suggested that students may use scientific calculators at the discretion of the instructors.

End of Semester Procedure

Review Packets for the Final Exam are available in Center II and on-line. You will be asked to submit an end of year summary.

**SUGGESTED
DAY-TO-DAY OUTLINE
MAT- 013B**

Day	Sections	Topics
1	Review chapter 5 and focus on 5.6	Review Polynomials and properties of exponents and focus on Multiplication of polynomials and special products.
2	6.1	GCF and factoring by Grouping
3	6.2	Factoring $x^2 + bx + c$
4	6.3, 6.4	Factoring $ax^2 + bx + c$ -Trial-and-Error Method, AC-Method
5	6.5(Concept 1), 6.6(except cubes)	Factoring binomials, General Factoring Summary
6	6.7	Solving Equations using the Zero Product Rule
7	Review Ch. 6	
8	Test # 1 on Ch. 6	
9	7.1, 7.2	Intro to rational expressions, Multiplication and Division of Rational Expressions
10	7.3	Least Common Denominator
11	7.4	Addition and Subtraction of Rational Expressions
12	8.1(Concepts 1 & 2), 8.2(Concepts 1,2,3,4), 8.3	Introduction to Roots and Radicals, Simplifying Radicals Addition & Subtraction of Radicals
13	Review of Ch. 7.1-4, 8.1-8.3	
14	Test # 2 on Ch. 7.1-4 & 8.1-3	
15	3.1(Concepts 2 & 3)	The Rectangular Coordinate System
16	3.2	Linear equations in two variables
17	3.3	Slope of a Line
18	3.4, 3.5	Slope-Intercept Form of a Line, Point-Slope Formula
19	Review Ch. 3	
20	Test # 3 on Ch. 3	
21	4.1	Solving systems of equations by graphing
22	4.2	Solving systems of equations by substitution.
23	4.3	Solving systems of equations by addition
24	4.4(Concepts 1,2,4 &5)	Applications of Linear equations in Two Variables
25	Review Ch. 4	
26	Test # 4 on Ch.4	
27	Final Review	
28	FINAL	