

College of Staten Island  
Department of Mathematics

**COURSE OUTLINE**  
**Mth 030 - Intermediate Algebra**

Fall 2008  
DM, JCD

**Text: Intermediate Algebra**, by George Woodbury, Pearson, Addison Wesley with **MyMathLab Student Access Kit**; Pearson Custom Publishing (**Available only in the CSI Campus Bookstore**)

**Calculator** (No Graphing or Programmable Calculators)

Week	Lecture	Section	Topics	Homework Problems
I	1	1.3	<b>Solving Linear Equations</b>	<b>All Homework is to be done on line using MyMathLab software and <u>access code</u> that was packaged with the course textbook</b>
	2	1.3	Equations in Fractional Form and Literal Equations	
	3	1.3	Solving Absolute Value Equations	
	4	1.4	Problem Solving – Applications of Linear Equations	
II	5	1.5	Solving Linear Inequalities	
	6	1.5	Solving Absolute Value Inequalities	
	7	2.1	<b>Rectangular Coordinate System</b> Graphing using the Table method. Graphing Linear Equations in One Variable	
	8	2.1	<b>Graphing Linear Equations</b> in Two Variables by using <b>Intercept method.</b>	
III	9	2.2	<b>Slope Formula</b> Horizontal and Vertical Lines	
	10	2.2	<b>Equation of a Line</b> - Slope Intercept Form Parallel and Perpendicular Lines	
	11	2.2	<b>Equation of a Line</b> – Slope Intercept Form - Graphing	
	12	2.3	<b>Equation of a Line</b> - Point Slope Form	

IV	13	2.3	<b>Equation of a Line – Point Slope Form – Graphing Parallel and Perpendicular Lines</b>	
	14	2.4	<b>Graphing Linear Inequalities</b>	
	15		<b>Review</b>	<b>Review Sheet Handout</b>
	16		<b>Exam #1</b>	
V	17	3.1	<b>Solving a System of Two Linear Equations by Graphing</b>	
	18	3.1	Solving a System of Two Linear Equations by <b>Substitution Method</b>	
	19	3.1	Solving a System of Two Linear Equations using <b>Elimination –by- Addition Method</b>	
	20	4.3	<b>Polynomials</b> - Addition and Subtraction	
VI	21	4.3	<b>Multiplying Polynomials</b>	
	22	4.4	<b>Factoring</b> - Common Factor	
	23	4.5	Factoring Trinomials	
	24	4.5 4.6	Factoring Trinomials Factoring Difference of Squares	
VII	25	4.8	<b>Solving Equations and Problem Solving</b>	
	26	4.8	<b>Solving Equations and Problem Solving</b>	
	27		<b>Review</b>	<b>Review Sheet Handout</b>
	28		<b>Exam #2</b>	
VIII	29	5.1	<b>Simplifying Rational Expressions</b>	

	30	5.2	Rational Expressions - <b>Multiply and Divide</b>	
	31	5.3	Rational Expressions - <b>Addition and Subtraction</b>	
	32	5.3	<b>More Rational Expressions - Addition and Subtraction</b>	
IX	33	5.4	<b>Complex Fractions</b>	
	34	5.5	<b>Rational Equations</b>	
	35	5.7	<b>Division of Polynomials</b>	
	36	4.1	<b>Exponents</b>	
X	37	4.2	<b>Negative Exponents</b>	
	38	6.1	<b>Roots and Radicals - Simplify</b>	
	39	6.2	<b>Rational Exponents</b>	
	40	6.3	<b>Simplifying, Adding, and Subtracting Radical Expression</b>	
XI	41	6.4	<b>Multiply and Divide Radical Expressions</b>	
	42	6.5	<b>Solving Radical Equations</b>	
	43		<b>Review</b>	<b>Review Sheet Handout</b>
	44		<b>Exam #3</b>	
XII	45	6.6	<b>Complex Numbers ( no Division )</b>	
	46	7.1	<b>Solving Quadratic Equations by Factoring and Square Roots</b>	
	47	7.1	Solving Quadratic Equations using <b>Completing the Square</b>	

	48	7.2	<b>Quadratic Formula</b>	
XIII	49	7.4	<b>Graphing a Parabola</b> by plotting points & symmetry	
	50	7.4	<b>Graphing a Parabola</b> using $y = (x - h)^2 + k$ or $y - k = (x - h)^2$	
	51	9.2	<b>Graphing the Circle</b>	
	52		<b>Review</b>	<b>Review Sheet Handout</b>
XIV	53		<b>Exam #4</b>	
	54		<b>Final Exam Review</b>	
	55		<b>Final Exam Review</b>	
	56		<b>Final Exam Review</b>	