

**College of Staten Island
Department of Mathematics**

**COURSE OUTLINE
Mth 015 / Mth 020 – Elementary Algebra**

Fall 2009 DM, AR

Text: Elementary Algebra, Concepts and Applications, 8th Edition, by Bittinger/Ellenbogen, with *MyMathLab Student Access Kit*; Pearson Custom Publishing / Addison Wesley
(Available in the CSI Campus Bookstore)

Text: COMPASS Prep Text (optional) COMPASS Mathematics a Study Guide for the COMPASS Mathematics Test, 2nd Edition, by Walter Okomo, McGraw-Hill Publishing

WEEK	LECTURE	SECTION	TOPICS	HOMEWORK PROBLEMS
I	1	1.1	Evaluate Variable Expressions	ALL HOMEWORK CAN BE ACCESSED ONLINE USING MyMathLab
		1.2	Translating Verbal Expressions to an Algebraic Expression or Equation Simplify Variable Expressions	
	2	1.3	Fraction Notation,	
		1.4	Integers, Absolute Value	
	3	1.5	Addition of Real Numbers	
		1.6	Subtraction of Real Numbers	
	4	1.7	Multiplication and Division of Real Numbers	
II	5	1.8	Exponents and Order of Operations	
	6	2.1	Solving Equation: Addition Principle Multiplication Principle	
	7	2.2	General Equations	
2.3		Formulas		

	8	2.4	Percent Equations and Applications	
III	9	2.5	Translating Sentences into Equations and Solving	
	10	2.5	Perimeter Problems	
	11	2.6	Solving Inequalities	
	12		REVIEW	Review Sheet Handout
IV	13		EXAM #1	
	14	2.5	Consecutive Integer Word Problems and Taxi Word Problems	
	15	2.5	More Word Problems and Applications	
	16	3.1	Reading Graphs Plotting Points	
V	17	3.2	Graphing Linear Equations	
	18	3.2	Graphing Linear Equations	
	19	3.3	Graphing Using Intercepts	
	20	3.5	Slope	
			First COMPASS Testing	
VI	21	3.5	Slope	
	22	3.6	Equation of a Line - Slope- Intercept Form	
	23	3.7	Equation of a Line - Point Slope Form	
	24		REVIEW	Review Sheet Handout
VII	25		EXAM # 2	
	26	4.1	Integer Exponents	

	27	4.2	Polynomials	
		4.3	Addition and Subtraction	
	28	4.4	Multiplying Polynomials & Rules for Exponents	
VIII	29	4.5	Multiplying Polynomials – FOIL Multiplying Polynomials – Special Products	
	30	4.7	Division of Polynomials	
	31	4.8	Negative Exponents	
	32	4.8	Scientific Notation	
IX	33	5.1	Factoring	
	34	5.2	Factoring Trinomials with leading coefficient of 1	
	35	5.4	Factoring Perfect Square Trinomials	
	36	5.4	Difference of Two Squares	
X	37	5.6	Solving Quadratic Equations by Factoring	
	38	5.6	Solving Quadratic Equations by Factoring	
	39		REVIEW	Review Sheet Handout
	40		EXAM #3	
XI	41	6.1	Rational Expressions	
	42	6.2	Multiplication and Division of Rational Expressions	
	43	6.3	Addition and Subtraction of Rational Expressions with <u>like</u> denominators	
	44	6.4	Addition and Subtraction of Rational Expressions with <u>unlike</u> denominators	

XII	45	6.6	Solving Rational Expressions	
	46	6.7	Applications using Rational Equations and Proportions	
	47	6.7	Applications using Rational Equations and Proportions	
	48	8.1	Simplify Radicals	
XIII	49	8.2	Multiply and Simplify Radicals	
	50	8.6	Pythagorean Theorem	
			Second COMPASS Testing	
	51		REVIEW	Review Sheet Handout
	52		EXAM # 4	
XIV	53		FINAL EXAM REVIEW	
	54		FINAL EXAM REVIEW	
	55		FINAL EXAM REVIEW	
	56		FINAL EXAM REVIEW	