BRONX COMMUNITY COLLEGE * CITY UNIVERSITY OF NEW YORK
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

SYLLABUS: **MTH 05 Elementary Algebra** (0 credits, 6 hours)
TEXT: Lecture Notes for MTH 05, by Andrew McInerney
    (http://fsw01.bcc.cuny.edu/mathdepartment/Courses/Math/MTH05/05text0916a.pdf)
PREREQUISITE: MTH 01 or equivalent and RDL 01 if required. CO-REQUISITE: RDL 02 if required

Learning Objectives: Proficiency in operations with signed numbers, and in the solution and graphical representation of linear equations. Proficiency in polynomial operations, factoring, and the solution and graphical representation of quadratic equations. Proficiency in operations involving integer exponents and the manipulation of radical expressions.

Preparing for Algebra (12 hours)	**Exercises**
I.1 A Review of Fractions	p.5 1—5
	p.6 1—4
	p.9 1—5
	p.14 1—6
	p.16 1—6
2.1 Signed Numbers	
2.2 Graphing signed numbers	
2.3 Adding and subtracting signed numbers	p.28 1—15
2.4 Multiplying and dividing signed numbers	p.31 1—6
2.5 Exponents and roots with signed numbers	p.32 1—5
3.1 The order of operations	p.39 1—8
3.2 Algebraic expressions	
3.3 Evaluating algebraic expressions	p.43 1—10
3.4 Translating algebraic expressions	p.46 1—8

Linear statements in one variable (12 hours)	
4.1 Algebraic statements and solutions	p.55 1—15
4.2 Solving linear equations	p.67 1—12, 11—16
4.3 "Solving" literal equations	p.71 1—5
4.4 Solving linear inequalities	p.82 1—6

Linear statements in two variables (12 hours)	
5.1 Solving linear equations in two variables	p.94 1—8
5.2 Slope and the geometry of lines	p.114 1—11
5.3 Solving linear inequalities in two variables	p.124 1—6
5.4 Solving systems of linear equations	p.135 1—8

Polynomials (8 hours)	
6.1 Introduction to polynomials	p.143 1—8
6.2 Adding and subtracting polynomials	p.148 1—7
6.3 Properties of exponents	p.155 1—8
6.4 Scientific notation	p.159 1—12
6.5 Multiplying Polynomials	p.164 1—12
6.6 Dividing Polynomials (by Monomials only)	p.167 1—5

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