BRONX COMMUNITY COLLEGE
of the City University of New York
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

SYLLABUS

MTH 06 – Intermediate Algebra and Trigonometry (0 credits, 6 hours per week)

Prerequisite: None. Students with Math Proficiency Index less than 40 are strongly encouraged to enroll in Math Start or CUNY Start, before taking college-level mathematics courses.

Textbooks: 1. Intermediate Algebra 2e, by Lynn Marecek and Andrea Honeycutt Mathis, OpenStax
https://openstax.org/details/books/intermediate-algebra-2e

2. Precalculus by Jay Abramson, OpenStax
https://openstax.org/details/books/precalculus

SECTIONS	TOPICS	SUGGESTED EXERCISES

Intermediate Algebra 2e Text
Chapter 1 Foundations (4hr)
1.2 Integers	39/63-66, 71-110, 119-126
1.3 Fractions	54/143-166, 173-182, 209-224,229-234

Chapter 2 Solving Linear Equations (6hr)
2.1 Use a General Strategy to Solve Linear Equations	113/5-26
2.3 Solve a Formula for a Specific Variable	147/165-194
2.5 Solve Linear Inequalities	186/296-317

Chapter 3 Graphs and Functions (4hr)
3.1 Graph Linear Equations in Two Variables	252/9-28, 33-68
3.5 Relations and Functions (Only the function notation)	328/307-332

Chapter 5 Polynomials and Polynomial Functions (6hr)
5.1 Add and Subtract Polynomials	503/1-28, 33-46, 53-68
5.2 Properties of Exponents and Scientific Notation	528/81-126, 131-155, 162-173
5.3 Multiply Polynomials	545/178-271
5.4 Dividing Polynomials	560/288-315

Chapter 6 Factoring (8hr)
6.1 Greatest Common Factor and Factor by Grouping	582/9-50
6.2 Factor Trinomials	600/61-130, 135-152
6.3 Factor Special Products	615/159-190, 213-220
6.4 General Strategy for Factoring Polynomials	625/233-246, 249-256
6.5 Polynomial Equations	641/277-326

Chapter 7 Rational Expressions and Functions (16hr)

7.1 Multiply and Divide Rational Expressions	666/1-24, 29-44, 49, 50
7.2 Add and Subtract Rational Expressions	682/75-142
7.3 Simplify Complex Rational Expressions	695/151-194
7.4 Solve Rational Equations	709/197-230

Chapter 8 Roots and Radicals (16hr)

8.1 Simplify Expressions with Roots	771/1-15, 19-22
8.2 Simplify Radical Expressions	789/55-65
8.3 Simplify Rational Exponents	805/119-162
8.4 Add, Subtract, and Multiply Radical Expressions	818/165-168, 183-186, 191-214(only ⓐ)
8.5 Divide Radical Expressions	832/245, 246, 259-262, 271-282
8.6 Solve Radical Equations	846/287-304, 315-326
8.8 Use the Complex Number System	868/409-476

Chapter 9 Quadratic Equations and Functions (6hr)

9.1 Solve Quadratic Equations Using the Square Root Property	893/1-30
9.2 Solve Quadratic Equations by Completing the Square	909/75-101
9.3 Solve Quadratic Equations Using the Quadratic Formula	923/113-136

Precalculus Text

Chapter 5 Trigonometric Functions (6hr)

5.4 Right Triangle Trigonometry (Only in degree measure)	495/10-41, 52-56

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