BRONX COMMUNITY COLLEGE
Of the City University of New York

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

SYLLABUS: MTH12 – INTRODUCTION TO MATHEMATICAL THOUGHT
[3 CREDITS, 3 HOURS]

PREREQUISITE: MTH03 or equivalent; corequisite ENG02 and/or RDL02, if required

TEXT: "Fundamentals of Mathematics" by William M. Setek Jr, and M. A. Gallo, 11ᵗʰ edition,
Pearson, 2009

SETS
2.1, 2.2	Introduction, Notation and Description	p. 77, 1 – 12
2.3	Subsets	p. 82, 1 – 11
2.4	Set Operations	p. 87, 1 – 8
2.5	Pictures of Sets (Venn Diagrams)	p. 97, 1 – 7, 12
2.6	An Application of Sets and Venn Diagrams	p. 101, 1 – 19 odd

LOGIC
3.1, 3.2	Introduction, Statements and Symbols	p. 126, 1 – 9 odd
3.4	Truth Tables	p. 143, 1 – 17
3.5	Conditional and Biconditional	p. 155, 1 – 29 odd
3.6	De Morgan's Law and Equivalent Statements	p. 160, 1 – 21 odd
3.7	The Conditional	p. 191, 1 – 26
3.10	Valid Arguments and Venn Diagrams	

PROBABILITY
4.1, 4.2	Introduction, Definition of Probability	p. 215, 1 - 7
4.3	Sample Spaces	p. 224, 1 – 7
4.4	Tree Diagrams	p. 227, 1 – 5
4.7	Counting, Ordered Arrangements, and Permutations	p. 258, 1 – 11, 15 – 19
4.8	Combinations	p. 265, 1 – 13
4.9	More Probability	p. 269, 1 – 13 odd

STATISTICS
5.1, 5.2	Introduction, Measures of Central Tendency	p. 287, 1 – 19 odd
5.3	Measures of Dispersion	p. 297, 1 – 13 odd
5.6	The Normal Curve	p. 327, 1 – 13 odd

CONSUMER MATHEMATICS
12.4	Markups and Markdowns	p. 727, 1 – 13 odd
12.5	Simple Interest	p. 732, 1 – 19 odd
12.6	Compound Interest	p. 738, 1 – 29 odd
12.8	Life Insurance	p. 739, 1 – 13 odd
12.9	Installment Buying	p. 756, 1 – 15 odd
12.10	Mortgages	p. 761, 1 – 19 odd

RK, AW/2009