BARUCH COLLEGE
DEPARTMENT OF MATHEMATICS
MTH 1030 SYLLABUS

Text: *Beginning and Intermediate Algebra, 7th Edition* by Elayn Martin-Gay, Pearson
The material should be purchased as an in-app purchase on MyMathLab.

Items marked with **(BrSp)** may be found on the course Brightspace site

All Homework Exercises are to be done on ***MyMathLab*** and are assigned by your instructor.
The Exercise set number corresponds to the section number.

A scientific calculator is required for some topics in this course. A TI-30XS Multiview calculator, or a similar scientific calculator, is recommended.
Graphing calculators **cannot** be used on any Math 1030 exams!

Section	Topics	Read Pages	Exercises (Use MyMathLab)
5.1	Exponents and Polynomials	P. 306– 315	MML 5.1.
Review			
3.6	Functions Domain and Range	P. 226 - 233	MML 3.6
8.1	Graphs of Functions	P. 510 - 515	MML 8.1
8.2	Functional Notation	P. 519 - 524	MML 8.2
10.2	Rational Exponents	P. 596 – 601	MML 10.2
10.5	Rationalizing	P.617 – 621	MML 10.5
10.6	Radical Equations and Problem Solving	P. 624 – 629	MML 10.6:
10.7	The Complex Numbers	P. 634 – 639	MML 10.7
BrSp	Indeterminate Forms (BrSp)	P. AA-3 - 4	P. AA-4: 1 – 4 (all)
Review			P.654: 1, 5, 9, 11, 13, 17, 21, 25, 27, 32, 33, 37, 39, 43, 45, 55, 59, 67, 75, 79, 84, 85, 90, 93, 95, 100, 102, 105, 108, 113, 118, 123, 126, 132, 135
11.1	Quadratic Equations, Completing the Square	P. 652 – 659	MML 11.1
11.2	The Quadratic Formula	P. 662 – 669	MML 11.2
11.3	Solving Equations by Using Quadratic Methods	P. 672 – 677	MML 11.3
11.4	Non-Linear Inequalities	P. 682 – 687	MML 11.4
11.5	Quadratic Functions and Their Graphs	P. 689 – 695	MML 11.5
11.6	Further Graphing of Quadratic Functions	P. 697 – 702	MML 11.6:
Review			P. 720: 1 – 43 odd

Section	Topics	Read Pages	Exercises (Use MyMathLab)
12.1	Composite Functions	P. 713 – 717	MML 12.1
12.2	Inverse Functions	P. 718 – 725	MML 12.2
12.3	Exponential Functions	P. 729 – 735	MML 12.3
12.4	Exponential Growth and Decay	P. 738 – 740	MML 12.4
12.5	Logarithmic Functions	P. 742 – 748	MML 12.5
12.6	Properties of Logarithms	P. 750 – 755	MML 12.6
12.7	Common, Natural Logarithms and Change of Base	P. 757 – 761	MML 12.7
12.8	Exponential and Logarithmic Equations and Applications	P. 763 - 766	MML 12.8
Review			P. 783: 3, 7, 11, 14, 15, 18, 23, 26, 29, 32, 37, 41, 43, 47, 53, 59, 63, 69, 71, 75, 76, 79, 85, 87, 89, 93, 95, 97, 101, 105, 1098, 117. 118
13.1	Circles	P. 783 – 786	MML 13.1
BrSp	Tangent Lines (BrSp)	P. AA-5 – 6	P. AA-6: 1 – 4 (all)
13.3	Solving Nonlinear Systems of Equations	P. 797 – 800	MML 13.3

Revised 06/11/2025
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LEARNING GOALS OF COURSE: Upon completion of this course, students will be able to:

- Perform algebraic manipulation on polynomials.
- Factor polynomials and solve quadratic equations.
- Manipulate irrational expressions.
- Determine the domain and range of a function.
- Solve non-linear inequalities.
- Graph quadratic functions and solve related applied problems.
- Compose functions.
- Solve non-linear systems.
- Find an equation for a circle in the plane with a given center and radius.
- Using “completing the square” to find the center and radius of a circle.