Long Island University, Department of Mathematics
Syllabus

Course Title: **Finite Mathematics**   **Math 16**   **3 CR**

Textbook: **Finite Mathematics ---- an Applied Approach, 8th Edition,**
By Abe Mizrahi & Michael Sullivan, John Wiley & Sons Inc.

Prerequisites: **MAT 9 (College Algebra) or Equivalence**

There should be at least three Tests and an Accumulative Final Exam. Each week consists of three 50 min or two 75 min classes.

Class Schedule:

WEEKS	SECTION & DESCRIPTION		HOMEWORK (Odd)
1	1.1-1.3	Rectangular Coordinates, Parallel and Intersecting Lines, Applications	P15: # 1- 77 P23: # 1- 47 P31: #1- 29
1	2.1-2.2	Systems of Linear Equations Substitution, Elimination, and Matrix Method	P49: #1- 27, #43-53 P62: #1- 59
	2.4-2.5	Matrix Algebra	P87: #1-53, P96: #1-37
2	3.1-3.3	Linear Inequalities and Linear Programming-Geometric Approach	P139: #1- 39, P150:1-37 P157 #1- 13
1.5	5.1-5.4	Simple, Compound Interest, and Annuities	P229:1-55, P237:1-39 P247: 1-25, P255: 1-27
2	6.1-6.4	Sets and Counting Techniques: Multiplication, Permutation And Combination	P275: #1-59, P280: 1-33 P285: #1-31, P291 #1-33 P297: #1- 27
2	7.1-7.5	Sample Spaces, Properties of the Probability of Events, Conditional Probability	P325: #1-59, P335: #1-55 P352: #1-55, P360 #1-33
1	8.1, 8.3	Bayes' Formula and Expected Values	P376: #1-33, P394: #1-15

Selected Topics from Markov Chains, Graphs, and Trees

WEEKS	SECTION & DESCRIPTION		HOMEWORK (Odd)
2-3	10.1-2	Markov Chains and Transition Matrices	P461: #1-15, P471: #1-13
	10.4-6	Two-person Games and Strategies	P484: # 1-15, P488: #1-9
	13.1-2	Graphs, Paths, and Connections	P571: #1-17, P575: #1-13
	13.3-5	Circuits, Trees, and Directed Graphs	P581: #1-11, P589: 5-27 P598: #1-15

Individual Instructors could schedule Computer Lab Sessions any time in the semester. Software may be available in the Lab or instructors' offices.