

COLLEGE OF STATEN ISLAND  
DEPARTMENT OF MATHEMATICS  
PRELIMINARY SCHEDULE  
MTH 339 - Applied Algebra

Course Material: On Blackboard

Text: Contemporary Abstract Algebra, by J. A. Gallian (10th edition)  
ISBN: 978-0-367-65178-7

Note: Each numbered lesson corresponds to a two-hour class.

<u>Lesson</u>	<u>Pages</u>	<u>Topics</u>
1	1-10	Divisibility and Modular Arithmetic
2	10-18	Mathematical Induction and Equivalence Relations
3	18-40	Mappings, Symmetry, Definition of a Group
4	41-57	Groups: Examples and Properties
5	59-64	Subgroup Tests
6	64-76	Examples of Subgroups
7	77-83	Cyclic Groups
8	83-94	Subgroups of Cyclic Groups
9		Review for Exam 1
10	Exam 1	
11		Discussion of Exam 1
12	97-126	Permutation Groups
13	127-147	Isomorphisms
14	149-158	Cosets, Lagrange's Theorem
15	158-170	Applications of Cosets
16	171-191	Direct Products

<u>Lesson</u>	<u>Pages</u>	<u>Topics</u>
17	193-217	Normal Subgroups
18	219-239	Group Homomorphisms
19	241-253	Abelian Groups
20		Review for Exam 2
21	Exam 2	
22		Discussion of Exam 2
23	255-259	Rings: Definition and Examples
24	259-265	Subrings
25	267-268	Integral Domains
26	269-278	Fields
27	401-415	Finite Fields
28		Review for Final