Department of Mathematics & Statistics
Concordia University

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MATH 369 (MATH 601A)
Abstract Algebra I
Fall 2016

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Text: *Abstract Algebra,* by David S. Dummit and Richard M. Foote, John Wiley & Sons Inc., 3rd Edition, ISBN: 978-0-471-43334-7.

Grading: The final grade will be the higher of:
either   a) the final exam (100%)
or   b) Assignments (10%), Midterm (30%), Final (60%).

Assignments: Assignments will be given each week and announced in class. They are very important. Solutions will be in the Digital Store (LB 116).

Topics: This is a standard first course on group theory.

Chapter	Topics to be Covered
0	Preliminaries: - Sets and Integers

1	Introduction to Groups:
	  - Definitions and examples
	  - Homomorphisms and isomorphisms
	  - Group actions

2	Subgroups:
	  - Definitions and examples
	  - Cyclic groups and subgroups
	  - Subgroups generated by subsets

3	Quotient Groups and Homomorphisms:
	  - Lagrange's Theorem
	  - Isomorphism Theorems

4	Group Actions:
	  - Cayley's Theorem
	  - The Class Equation
	  - Sylow's Theorems