Department of Mathematics & Statistics
Concordia University

> ### MATH 369 (MATH 601), Sec. A
> Abstract Algebra I
> *Fall 2018*

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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%).

If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

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

Academic Integrity and the Academic Code of Conduct

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: concordia.ca/students/academic-integrity." *[Undergraduate Calendar, Sec 17.10.2]*