Course Outline

Mathematics 2233, Group Theory

(Really Topics in Abstract Algebra)

Winter Term 2011

Lakehead University, Thunder Bay Ontario

Instructor: Dr. Andrew P. Dean

Office: CB 4012A, Administrative Assistant CB 4012

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Meeting times: MW 4-5:20

Office Hours: TBD (probably Friday pm)

Text: Contemporary Abstract Algebra, 7th ed by Joseph Gallian

Course Prerequisites: Math 2231 and Math 2255

Course Outline: An extension of Mathematics 2213. Review of essential properties of groups and rings. Classification of cyclic groups. External and Internal direct products of groups. Fundamental Theorem of Finite Abelian Groups. Polynomial Rings. Factorization of Polynomials. Extension Fields. Algebraic Extensions. Finite Fields. If time permits may cover the Sylow Theorems, Introduction to Algebraic Coding Theory or an Introduction to Galois Theory.

In Chapters from Gallian: Second half of Chapter 4, Chapter 8, last part of Chapter 9, Chapters 11, 16, 17, 18, 20, 21, 22

Evaluation:

	Assignments	20%	(5-6)

Notes

	Tests	30%	(2 X 15%, in class)
Dates:	Test 1	Feb. 2	
	Test 2	March 9	
Final:		50%	(in exam period, 3 hours)

Important Dates:

First Class	Wednesday Jan. 4
Last Class	Monday April 4
Break Week	Feb. 21-25
Add-drop date	Monday Jan. 17
Withdrawal date	Friday March 4
Exams	April 6-16

Please turn cell phones off. Thanks