

**Syllabus for MAT301F - Groups and Symmetries  
Fall 2013**

**Instructor:** Dinakar Muthiah

Lecture: Wednesdays 6pm-9pm, LM 158

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Office Hours: W 3pm-5pm (tentative)

**Teaching Assistant:** Patrick Robinson

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**Text:** *Contemporary Abstract Algebra*, Joseph A. Gallian, Eighth Edition. **IMPORTANT:** We will be following this book closely, so it is very important that you have access to it as early as possible.

**Material to be Covered:** This is a rigorous course on Group Theory. That means proofs will be presented in lecture, and you will be required to supply proofs in your assignments. We will cover chapters 1-10 of the book. If we have time at the end, we may cover group actions or chapter 11 of the book.

**Homework and Quizzes:** There will be two homeworks and two quizzes for this course. Here are the due dates:

Homework 1: 2 October 2013  
Quiz 1: 16 October 2013  
Homework 2: 13 November 2013  
Quiz 2: 27 November 2013

**Exams:** There will be a midterm exam for this class on Wednesday, 30 October 2013, during the class time of 6pm-9pm. The exact duration of the exam will be announced. There will be no lecture on that day.

**Final Exam:** TBA

**Marking Scheme:**

Homeworks:	15%
Quizzes:	10%
Midterm:	30%
Final:	45%

**Working Together:** I encourage you to work together on homework assignments. Your peers are your allies, and you should feel free to learn from them. However, you should always write up solutions on your own. Working together on quizzes and exams is forbidden.

**Calculator:** Calculators are not allowed on any quiz or exam.

**Absences:** For excused absences, documentation must be provided. For planned absences, documentation should be provided no later than two weeks prior to the absence. In general, for excused absences, any missed assignments will simply not be used in the calculation of final course grades.

For unexcused absences, missed assignments will receive a grade of zero.

**Cheating:** The University takes cheating very seriously. Please see [http://www.utoronto.ca/academicintegrity/Academic\\_integrity.pdf](http://www.utoronto.ca/academicintegrity/Academic_integrity.pdf). To quote this document: “Ignorance of the rules does not excuse cheating or plagiarism”.

**Expectations:** This will be the first proof-based math class for many of you. Learning math this way is much like learning a new language or learning how to play a musical instrument. It will be extremely frustrating. Attending lecture and tutorial will be nowhere near sufficient to understand the material. You will need to READ the book carefully prior to lectures. Reading mathematics is very difficult, and you will have to think about the material for many hours each week. I will guide you—much like a language or music instructor would—but the onus is squarely on you to struggle enough to learn the material. I also encourage you to make friends with your classmates and discuss the material with them outside of class. Your peers are a valuable resource. You should feel free enough to learn from them, and you should feel generous enough to teach to them.