

Math 3356: Mathematical Problem Solving

Winter 2019

Instructor:

- Dr. Yin Chen, RB 2017
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Course webpage:

- <http://flash.lakeheadu.ca/~ychen/math3356.html>

Lectures:

- Monday, Wednesday, and Friday, 14:30 – 15:30, RB 3023

Office Hours:

- | | |
|--------|---------------|
| Monday | 11:30 – 13:00 |
| Friday | 11:30 – 12:30 |

Textbook:

- There is no assigned textbook. As a result, attendance and lecture notes are very important.

Course Content:

- The course content is intended to help students develop techniques to solve problems from various mathematical fields. Problems will be drawn from calculus, probability, number theory, geometry, combinatorics, game theory, and other branches of mathematics. Proofs will tend to involve combining techniques such as induction, proof by contradiction, and counting arguments. Students need to do a project on some topic to show the skills to solve a theoretical or practical problem.

Exams:

- Midterm Exam (take home): assigned on Wednesday, Feb. 27, due on Friday, March 1.
- Final Exam I (written in class): 14:30 – 15:30, Wednesday, April 3, RB 3023.
- Final Exam II (take home): assigned on Wednesday, April 3, due on Friday, April 5.

Course Grade:

Assignments	25%
Midterm Exam (take home)	20%
Project	15%
Final Exam I (in class)	20%
Final Exam II (take home)	20%