Course

Course Math 308, Euclidean Geometry,

2017 W. Term 2, January – April 2018

Section 201

Instructor Kee Y. Lam

MathX 1208 (604) 822-5458

Contact: keeylam308@gmail.com

Lectures: M W F 11:00 - 11:50 at MathX 1100

Text Book: Geometry from Euclid to Knots by Saul Stahl, Dover Publications 2010

Note: this text book is currently out of stock. Reference and notes will be

provided during class.

Office Hours: Mondays 4:10-5:20 p.m.

Thursdays 3:30 - 5:00 p.m. Other hours by appointment

Course Outline

1. A review of Euclidean Geometry with emphasis on the axiomatic approach.
The Axioms of Euclid and Hilbert. The Parallel Axiom.

- 2. Some highlights of Euclidean Geometry.
- 3. Motions in Euclidean plane and space.
- 4. Groups of geometric transformations.
- 5. The Poincare upper-half plane and its geometry; Non-Euclidean Geometries.
- 6. The question of independence of the Parallel Axiom.
- 7. The question of consistency of an axiomatic system.

Evaluations

Assignments: A total of 8 or 9 Assignment Exercises (~12%), to be posted on Course Page.

Late assignments will not be accepted. The assignment with the lowest score

will be disregarded.

Quizzes: Two short quizzes (6% each).

Mid-Term: A one-hour mid-term, scheduled for Friday, February 16, 2018. Final exam: A final exam in April 2018 accounting for 50% of the Course Grade

Public Holidays (no class):

Monday Feb 12, 2018 Friday Mar.30, 2018 Monday Apr 2, 2018

Mid-term break: February 19 - 25, 2018