## McGill University Department of Mathematics and Statistics

## MATH 576 (Geometry and Topology I) COURSE OUTLINE – Fall Semester 2008

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Office hours: Tuesday 10-11:30, Thursday 10–11:30, or by appointment.

Course Webpage: http://www.math.mcgill.ca/guan/courses/m576.html

Textbook: J.R. Munkres, Topology, second edition Prentice Hall, 2000.

## **References:**

- (1) Seifert and Threlfall's, Textbook of Topology,
- (2) Armstrong, Basic Topology

**Course Outline:** This is an introductory course in Topoplogy. The first part of the course will be devoted to basic point-set topology, including continuity, connectedness, compactness, product spaces, quotient spaces, separation axioms, metric spaces. The second part of the course will introduce the fundamental group and covering spaces. In addition, simplicial complexes, and perhaps simplicial homology will be treated as well. Mastery of the material requires that the students devote a significant amount of time to reading the textbook and solving problems.

Homework 20%: There will be around half a dozen assignments.

Midterm 20%: There will be a midterm during the semester on TBA.

Final Exam 60%: 3 hour exam covering the entire course scheduled during official exam period.

**Supplemental**: There will be an official supplemental exam worth 60% of the mark.

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