## MATH 2000B - Mathematical Concepts - Spring 2009

Instructor:	Dr. Nathan Ng	D522	ng@cs.uleth.ca		
Lectures:	Tu,Th	3:05-4:20pm	Room: UH C674		
Office hours:	Tu 1:35-2:35pm	Th 4:30-5:30pm	or by appointment		

Course web-page: www.cs.uleth.ca/~nathanng/MATH2000.html Quiz and midterm solutions will be posted here. You will also find other course materials and course announcements here.

**Textbook:** "Mathematical Proofs - A Transition to Advanced Mathematics" by Gary Chartrand, Albert D. Polimeni, and Ping Zhang.

**Calendar course description:** Logic, proofs. Set theory. Relations and functions. Finite and countable sets. Induction. Examples of axiomatic mathematical theories.

Finite and countable sets and examples of axiomatic mathematical theories will only be covered if time permits.

**Prerequisite:** Four courses (12.0 credit hours) in Arts and Science; One of Mathematics 31, or a blended grade of at least 80% in Pure Mathematics 30, or Logic 2003, or a 1000-level course in Mathematics, Computer Science, Statistics, or Physics.

## **Evaluation:**

Quizzes 80 marks 40%

Midterm Test 40 marks 20% Tues., March 3, in class.

Final Exam 80 marks 40% Tues., April 21, 2pm-5pm.

There will be 10 quizzes. Your best 8 quizzes will constitute your quiz mark with each of these quizzes worth 5%.

Quiz dates are: Jan. 22, Jan. 29, Feb. 5, Feb. 12, Feb. 26, Mar. 12, Mar. 19, Mar. 26, April 2, April 9.

**Grade cutoff:** The following is an approximate scale used to assign letter grades for the course. The instructor reserves the right to change the cut-off points, depending on the overall performance of the class.

A+	190	B+	153	C+	133	D+	110
А	170	В	146	С	126	D	100
A-	160	B-	140	C-	120	$\mathbf{F}$	< 100

**Exam policy:** Missed midterms tests or quizzes will receive a grade of zero. No provision will be made for makeup tests or quizzes; except for medical reasons. In the exceptional case where a student cannot attend a test or quiz, the student will have to write a letter to me explaining the circumstances (an e-mail or verbal request will not suffice) and provide supporting documentation for his/her absence.

Students with special needs are encouraged to identify themselves to me as soon as possible.

Tutorials: Students must be registered in one of the two tutorial sections. They are:

Math 2000 Tut 03, Friday, 1:00-1:50pm, Room: E519 Math 2000 Tut 04, Friday, 2:00-2:50pm, Room: E519

The instructor of the tutorials is Rex Forsyth. Attendance of the tutorials is *mandatory*. During the tutorials, solutions to assigned exercises will be presented. In addition, there will be further discussion of the course content. Students can also use the tutorial to ask questions concerning the course material and homework questions.

**Warning:** Plagiarism and cheating are serious academic offences. See the U of L calendar for information on rules and penalties. Any student found to have submitted copied work on any quiz or midterm will receive a grade of zero.