

# Lakehead University

Department of Mathematical Sciences

**MATH-5332-FA – Estimation and Hypothesis Testing – Fall 2013**

## COURSE OUTLINE

**Instructor:** Dr. Deli Li, RB-2003, Ext. 8231, [dli@sleet.lakeheadu.ca](mailto:dli@sleet.lakeheadu.ca)

---

**Description:** This one semester course will explore various advanced topics in statistics such as sampling distributions, point estimation, sufficiency and completeness, interval estimation, tests of hypothesis, contingency tables and goodness-of-fit, nonparametric methods, regression and linear models, reliability and distributions, etc.

**Prerequisite:** Permission of the Chair of the Department. Students should be comfortable with probability and statistics at the level of MATH-3332 and MATH-3334.

**Textbooks:** Two optional textbooks are as follows

**Book 1.** *Theory of Point Estimation, 2<sup>nd</sup> Edition* by E.L. Lehmann and G. Casella

**Book 2.** *Statistical Hypothesis Testing: Theory and Methods* by Ning-Zhong Shi, Jian Tao

**Lectures:** Monday & Wednesday 01:00 PM - 02:30 PM in RB-3051.

**Office Hours:** Monday & Wednesday 10:00 AM - 12:00 PM. or by appointment.  
For an appointment, please email the instructor.

### Course Requirements:

**Assignments:** A list of assignment problems will be given to students during the Wednesday class period and are due on the Friday in the following week. Late assignments will not be marked under any circumstances. Sloppy writing may face a mark penalty up to 20%. There will be approximately 6 assignments worth 20% of your final mark. Each student's lowest assignment mark will be dropped for the final mark calculation.

**Midterm Exam:** The midterm exam will be written during the regularly scheduled class time (01:00 PM – 02:30 PM in RB-3051) on Wednesday October 16, 2013. No make-up test is provided for any student who misses writing the midterm exam at the scheduled time. If there is a legitimate (documented) excuse, the final mark will be calculated on the basis of the final exam. Otherwise, a grade of 0% for the missed exam will be averaged with other grades.

**Final Exam:** The final exam will be written in the scheduled three hours. Further details will be provided closer to the exam date.

**Note:** Exams will be open book and a non-programmable calculator is allowed.

### **Determination of Final Marks:**

The basic formula is as follows

<b>Assignments:</b>	<b>20%</b>
<b>Attendance:</b>	<b>10%</b>
<b>Midterm Exam:</b>	<b>20%</b>
<b>Final Exam:</b>	<b>50%</b>

**Marking Disputes:** If you feel you have been treated unfairly in the marking of the midterm exam or an assignment, put your complaint in writing on the front of the paper and return it to the instructor. Do not put it back in the Assignment Box.

**Drop Date:** The final date to withdraw from this course without academic penalty is Monday 04 November 2013.

**Academic Dishonesty:** All cases of academic dishonesty will be dealt with according to the University's Code of Student Behaviour and Disciplinary Procedures, copies of which are available from the Registrar.