# STA 261 LM5101 – Probability & Statistics II Course Outline (Summer 2014)

## Course Information

## **Course description**

A sequel to STA257H1, providing a rigorous introduction to the logical foundations of statistical inference and the practical methodology engendered. Topics include: statistical models, parameters, samples and estimates; the general concept of statistical confidence with applications to the discrete case and the construction of confidence intervals and more general regions in both the univariate and vector-valued cases; hypothesis testing; the likelihood function and its applications; the basics of data analysis, unbiasedness, sufficiency, linear models and regression.

#### **Course Instructor**

Jonathan Lee, jonathan@utstat.toronto.edu Sidney Smith 6025

## **Instructor office hours**

TBD Wed. 2-4pm
Or by appointment (via e-mail)

TA office Hows Thurs 4-6pm Stats Aid Centre

#### Course webpage

Blackboard (http://portal.utoronto.ca)

Check frequently for announcements and updates. Lecture slides will be posted by Monday before each week.

#### Lectures

Sidney Smith room 2135 Monday and Wednesday 7pm - 10pm

### **Tutorials**

Monday and Wednesday 6pm - 7pm (starting second week of classes)

#### **Text**

Rice, John (2007), *Mathematical Statistics and Data Analysis, Third Edition*. Brooks/Cole, ISBN 0-534-39942-8.

# **Academic Integrity**

You are expected to follow the University of Toronto's Code of Behaviour on Academic Matters. See <a href="http://www.utoronto.ca/academicintegrity/">http://www.utoronto.ca/academicintegrity/</a>.

## **Evaluation**

Grading scheme

- 25% Term test 1
- 25% Term test 2
- 50% Final exam

#### Midterm and final exam

There will be two term tests and one final exam. The term tests will be 1-hour closed book tests, held during tutorial time on

Wednesday, July 16, 2014 from 6pm – 7pm. Wednesday, July 30, 2014 from 6pm – 7pm. Location to be announced.

There will be **no** make-up tests. If a test is missed due to a legitimate reason, proper documentation **must** be provided to the instructor and the weight will be transferred to the final exam.

The final exam date will be scheduled by the registrar during the final exam period and will be announced in class and on Blackboard. The final exam will be a cumulative exam covering material from the entire course.

## **Grading questions**

Grading questions for tests should be brought in person to the instructor within one week of the test being returned.

## Extra Help

Questions should primarily be addressed to TAs during tutorials. The teaching assistants for this course this term are:

- Tadeu Ferreira, tadeu@utstat.toronto.edu
- Zhenhua Lin, zhenhua@utstat.toronto.edu

#### E-mail

Emails about course administration should be sent to the instructor. Questions about course content should be sent to <a href="mailto:sta261@utstat.toronto.edu">sta261@utstat.toronto.edu</a> which is monitored by the instructor and the TAs. You should expect a response to emails within 48 hours Monday-Friday.

E-mail should be used only to provide non-personal information or to ask a question that requires a brief response. For more lengthy discussions, you should raise the question during tutorial or visit during office hours.

Extra office hours will be held by both instructor and TAs the week before the final exam.