Pre/corequisites
ACT348H, ACT451H, STA261H, STA347H
Students who do not have the prerequisites or prerequisite waivers will be removed from the course on Friday, January 18.

Lecture Times and Locations
Monday 2PM-3PM UC 144, Wednesday 2PM-4PM, UC 144

Instructor & Office Hours
S. Broverman, SS6016, 978-4453, sam@utstat.toronto.edu
Monday 10AM-Noon

Recommended Reference Material
Loss Models, From Data to Decisions, S. Klugman, etc. 3rd Ed. or later

Lecture notes and problem sets will be posted on Quercus.

Course Outline
The course will cover the material in the Model Estimation section of ACTEX Study Guide for Exam STAM. Material on Casualty Insurance may be covered as well, time permitting.

Marking Scheme
Term Test - 40%
Final Exam - 60%
There will be no makeup test. Anyone who misses the term test and has a valid doctor note will have the term test weight transferred to the final exam.

A calculator will be needed for some test questions. There is no restriction on the type of calculator allowed.
Approximate Outline

Week One: Review of Mathematical Statistics, Point Estimation, Interval Estimation, Hypothesis Tests

Week Two: Empirical Estimation for Individual Data and Group Data

Week Three: Kernel Smoothing Method

Week Four: Left Truncated and Left Censored Data

Week Five: Parametric Estimation, Method of Moments, Percentile Matching

Week Six: Midterm Review and Midterm Test. The test accounts for 40% of the final mark.

Weeks Seven and Eight: Maximum Likelihood Estimation

Weeks Nine and Ten: MLE for Incomplete Data, EM algorithm, Mixture Models, Data Fitting and Analysis

Week Eleven: Graphical Methods for Model Selection

Week Twelve: Model Selection and Tests