

ACT 452H1S, Loss Models 2, Winter 2016

Lecture Section	L0101
<i>Lecture times, location</i>	M 2:10 p.m. - 3:00 p.m. – SS1088 Wed 2:10 p.m. - 4:00 p.m. – SS1088
<i>Instructor</i>	Dr. Andrei Badescu, SS6024 badescu@utstat.toronto.edu
<i>Instructor office hours</i>	Monday and Wednesday: 10:00 a.m.- 12:00 p.m. – SS6024 or by appointment.
<i>TA</i>	Yang Jennifer Office hours: Friday 12-1

Texts:

Required

- *Exam C Study Guide, Volume 1, Part B* - 2014, Samuel A Broverman, available on ACTEX website (<http://www.actexamdriver.com/>).

Additional

- *Loss Models from Data to Decisions*, 4th Ed., by Klugman S., Panjer H., Willmot G.

Coverage:

- Review of Mathematical Statistics
 - Estimators
 - Confidence Intervals and Hypothesis Testing
- Estimation for complete data
 - Empirical Estimation for Individual Data
 - Empirical Estimation for Grouped Data
- Estimation for modified data
 - Estimation from Incomplete Data
- Parameter Estimation
 - Methods of Moments
 - Percentile Matching
 - Maximum Likelihood Estimation
- Model Selection
 - Graphical Methods
 - Hypothesis Testing

Course Objective:

This course is designed to help you to prepare for the portion of Exam C of the Society of Actuaries (www.soa.org). Questions and in-class discussions are encouraged.

Marking Scheme:

The final course mark will be determined via 1 in-class term test, worth 40% and a final exam worth 60%. These weights will not be changed, either for the whole class or for any individuals. The test and the final exam will NOT be in multiple choice format.

- Term Test - 24 February, 1 ½ hours (during the class time)
- Final Exam - TBA

Missed Term test:

There will be no written make-up test. If you miss the term test, you are required by faculty regulation to submit, **within one week**, appropriate documentation to the course instructor. Print on the documentation your name, student #, the course number and the date. I shall be skeptical about accepting medical certificates unless the doctor specifically indicates that in his/her opinion there was a disabling health problem on the day of the test. If your documentation is accepted, there will be an oral examination of 1 ½ hours at a time decided by the instructor.

Calculator:

A calculator is essential for working exercises, tests and final exam. The Texas Instruments BA II PLUS calculator is one of the calculators allowed on the Society of Actuaries examinations; it has the financial functions that would be needed for this course and is recommended. All non-programmable calculators are allowed. Please go to the SOA website and check the list of calculators allowed by SOA and those will be ok for this course.

E-mail policy:

E-mails will only be answered if they are from a U of T address. When there are many e-mail requests, not all can be answered, but an answer to a common question will be posted on the blackboard.

Updates:

All the possible updates regarding to this course will be made in class and on blackboard.