ACT 455H1S, Advanced Topics in Actuarial Science, Winter 2015

<table>
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<tr>
<th>Lecture Section</th>
<th>L0101</th>
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<td>Lecture times, location</td>
<td>Tu 2:00 p.m. - 4:00 p.m. – Wilson Hall - New College, WI 1016&lt;br&gt;Thur 2:00 p.m. - 3:00 p.m. – WI 1016</td>
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<tr>
<td>Instructor</td>
<td>Dr. Andrei Badescu, SS6024&lt;br&gt;<a href="mailto:badescu@utstat.toronto.edu">badescu@utstat.toronto.edu</a></td>
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<td>Instructor office hours</td>
<td>Tuesday: 4:00 p.m.- 5:30 p.m. – SS6024&lt;br&gt;or by appointment</td>
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<td>Teaching assistants:</td>
<td>Lawrence Toh</td>
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Texts:

**Required**
- *Exam MLC Study Guide* - 2015, Vol 1A and Vol 1B, Samuel A Broverman, available at ALICOs, St George and College.

**Additional**
- *Actuarial Mathematics, 2nd Ed.*, by Bowers et al, Society of Actuaries, available on the SOA website to be ordered.
- *Actuarial Mathematics for Life Contingent Risks, Dickson D, Hardy M., Waters II.*

**Approximate Coverage:**

- Expense Models - Sections 20, 25, 26, 27 from MLC Study Guide, Volume 1A and 1B, 2015
- Continuous Time Markov Chains - Sections 38, 39 MLC Study Guide, Volume 1B, 2015

**Course Objective:**

This course is designed to help you to prepare for the portion of Exam MLC 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 1/2 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.

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.