SPECIAL TOPIC IN ACTUARIAL SCIENCE (3)

Loss Models I

Mo 2:30 PM – 4:20 PM
AQ 5047, Burnaby

We 2:30 PM – 3:20 PM
BLU 10655, Burnaby

Dec 12, 2016
12:00 PM – 3:00 PM
WMC 2532, Burnaby

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Dependent on the topics covered.

Description

Topics in areas of actuarial science not covered in the regular certificate curriculum of the department.

Course Title: Loss Models I

Prerequisite: ACMA 320

Course Outline:

This course covers the fundamentals of actuarial loss models. The topics covered correspond to Chapters 3 6, 10 14, 15.1 15.2, and 16 of the required textbook. They include the following:

1. Severity models: basic distributional quantities, tail behavior, risk measures, creating new distributions, extreme value distributions.
2. Frequency models: Poisson, negative binomial, binomial distributions, (a,b,0) class, truncation and modification at zero.
3. Review of Mathematical statistics: point estimation, measures of quality, interval estimation, tests of hypotheses.
4. Estimation for complete and modified data: empirical distributions for individual and grouped data, Nelson Aalen