ACMA 335
Risk Theory

Fall 2012
Day Course

Students requiring accommodations as a result of disability, must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Instructor: Dr. Cary Tsai

Prerequisite:

ACMA 320

Required Text:

Loss Models: From Data to Decisions 3rd ed. By Klugman, Panger, and Willmot; Publisher Wiley

References:

ACTEX Manual for SOA Exam C (or CAS Exam 4), see website: www.actexmadriver.com

Calendar Description:

Basic distributional quantities: moments, percentiles, generating functions and sums of random variables. Classifying and creating distributions. Frequency and severity with coverage modifications: deductibles, the loss elimination ratio and the effect of inflation for ordinary deductibles, policy limits, coinsurance. Aggregate loss models. Multi-state transition models with actuarial applications: non-homogeneous Markov chains, cash flows and their actuarial present values. The exponential distribution and the Poisson process. Covers part of the syllabus for Exam M of the Society of Actuaries, and Exam 3 of Casualty Actuarial Society. **Quantitative**

Outline:

This course studies frequency and aggregate loss models. The topics covered correspond to part of the syllabus of Exam C of the Society of Actuaries (or Exam 4 of Casualty Actuarial Society)

Grading Scheme: