RISK THEORY (3)

Class Number: 5685   Delivery Method: In Person

COURSE TIMES + LOCATION:

Mo 2:30 PM – 4:20 PM
AQ 2104, Burnaby

We 2:30 PM – 3:20 PM
AQ 5007, Burnaby

EXAM TIMES + LOCATION:

Dec 9, 2015
12:00 PM – 3:00 PM
BLU 10021, Burnaby

INSTRUCTOR:

Cary Tsai
cltsai@sfu.ca
778-782-7044
Office: SC-K10563

PREREQUISITES:

Prerequisite: : ACMA 320.

Description

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.

COURSE DETAILS:

Course Outline:

This course studies frequency and aggregate loss models. The topics covered correspond to part of the syllabus of Exams MFE and C of the Society of Actuaries (or Exams 3F and 4 of Casualty Actuarial Society)

This course is accredited under the Canadian Institute of Actuaries (CIA) University Accreditation Program (UAP) for the 2015-2016 academic year. Achievement of the established exemption grade in this course may qualify a student for exemptions from writing certain preliminary exams. Please note, a combination of courses may be required to achieve a single exemption. Please see http://www.cia-ica.ca/membership/uap for full details.

Grading

Assignments	10%
Midterms	40%
Final Exam	50%

Materials

REQUIRED READING:

Required Text:

Loss Models: From Data to Decisions (4th ed.), by Klugman, Panger, and Willmot. Publisher: Wiley

RECOMMENDED READING:

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

DEPARTMENT UNDERGRADUATE NOTES:

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

Tutor Requests:
Students looking for a Tutor should send an email to stat@sfu.ca with "Tutor Request" in the subject line. Please only include information that you would like forwarded to our tutors mailing list (contains people external to the University). We accept no responsibility for the consequences of any actions taken related to tutors.