

FALL 2017 - ACMA 490 D300

SELECTED TOPICS IN ACTUARIAL SCIENCE (3)

Actuarial Mortality & Morbidity Risks

Class Number: 7889 Delivery Method: In Person

COURSE TIMES + LOCATION:

Mo 2:30 PM – 4:20 PM

RCB 6122, Burnaby

We 2:30 PM – 3:20 PM

RCB 6122, Burnaby

INSTRUCTOR:

Hyuk-Sung Kwon

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PREREQUISITES:

Dependent on the topic covered.

Description

CALENDAR DESCRIPTION:

The topics included in this course will vary from term to term depending on faculty availability and student interest.

COURSE DETAILS:

Course Title: Analysis of Actuarial Mortality & Morbidity Risks**Prerequisites:** ACMA 320 and STAT 330

Course Outline:

This course is intended to discuss the nature of mortality and morbidity risks from the perspective of actuarial risk management and various models to quantify mortality and morbidity risks. Upon successful completion of the course, students are expected to construct an appropriate mortality/morbidity model and to perform actuarial risk analysis based on the model. In addition, students are expected to improve their communication skills with the results of actuarial analysis.

Grading

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|--------------|-----|
| Assignments | 15% |
| Presentation | 15% |
| Two Miderms | 30% |
| Final Exam | 40% |

NOTES:

Above grading is subject to change.

Materials

RECOMMENDED READING:

Survival Analysis, 2nd edition. Techniques for Censored and Truncated Data. Authors: Klein, J.P. and Moeschberger, M.L. Publisher: Springer

eBook ISBN: 978-0-387-21645-4

Hardcover ISBN: 978-0-387-95399-1

Softcover ISBN: 978-1-4419-2985-3

Generalized linear models for insurance data, 1st ed. Authors: Jong, P. and Heller, G.Z. Publisher: Cambridge University Press
ISBN: 9780521879149

Applications of multi-state risk factor/mortality model in life insurance;

Insurance: Mathematics and Economics, 43, 394-402. Authors: Kwon, H.S. and Jones, B.L. 2008

Available **on-line** through the SFU Library

The impact of the determinants of mortality on life insurance and annuities, 38, 271-288. Authors: Kwon, H.S. and Jones, B.L.
2006

Available **on-line** through the SFU Library

DEPARTMENT UNDERGRADUATE NOTES:

Students with Disabilities:

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 visit <http://www.stat.sfu.ca/teaching/need-a-tutor-.html>. We accept no responsibility for the consequences of any actions taken related to tutors.

REGISTRAR NOTES:

SFU's Academic Integrity web site <http://students.sfu.ca/academicintegrity.html> is filled with information on what is meant by academic dishonesty, where you can find resources to help with your studies and the consequences of cheating. Check out the site for more information and videos that help explain the issues in plain English.

Each student is responsible for his or her conduct as it affects the University community. Academic dishonesty, in whatever form, is ultimately destructive of the values of the University. Furthermore, it is unfair and discouraging to the majority of students who pursue their studies honestly. Scholarly integrity is required of all members of the University. <http://www.sfu.ca/policies/gazette/student/s10-01.html>

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