

FACULTY OF SCIENCE Department of Mathematics and Statistics

STATISTICS 437 "RISK THEORY"

Calendar Description: H(3-1T)

Economics of insurance; individual risk models for short term; collective risk models for single period; collective risk models over an extended period; application of risk theory to

insurance.

Prerequisite: Mathematics 323.

Main Texts: Loss Models, by Klugman, Panjer, Willmot, 1998.

Chapter 3. Frequency Distributions - Models for the Number of Payments. Chapter 4. Aggregate Loss Models: Emphasis on Sections 4.1-4.3, 4.5-4.6 (excluding 4.6.5.2), 4.8, 4.9.4.

<u>Actuarial Mathematics</u>, by <u>Bowers et al.</u> Chapter 13 (excluding autoregressive discrete-time model and appendix). Section 14.5.

Syllabus

Topics:

This syllabus corresponds with that part of the professional actuarial examination concerned with risk theory and ruin models. See www.soa.org for the latest syllabus.

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