UNIVERSITY OF CALGARY

FACULTY OF SCIENCE
Department of Mathematics and Statistics

ACTUARIAL SCIENCE 527
"LIFE CONTINGENCIES III"

Calendar Description: H(3-1T)

Multiple decrement models: time until and causes of death. Associated single decrement tables. Various pension funding cost methods: unit credit, projected unit credit, entry age normal, individual level premium and aggregate. Experience gains and losses: allocating gains and losses to investment, mortality, retirement and salary components.

Prerequisite: Mathematics 323 and 353 and Actuarial Science 327.

Suggested Texts: (1) “Actuarial Mathematics”, Bowers, Gerber, Hickman, Jones, Nesbitt, second edition, (1997); (2) “A problem solving approach to pension funding the valuation”, Aitken, second edition.

Syllabus

Topics

Chapter 10.1-10.6(Bowers): Multiple decrement models

Chapter 1 (Aitken): Pension Benefits

Chapter 2 (Aitken): Increasing cost individual cost method

Chapter 3 (Aitken): Level cost individual cost method

Chapter 4 (Aitken): Aggregate cost methods

Chapter 5 (Aitken): Experience gains and losses

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02:07:01 Effective Fall 2002
Math 353 added as prereq Fall 2009

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