

# FACULTY OF SCIENCE Department of Mathematics and Statistics

#### Actuarial Science 527

### Life Contingencies III

(see Course Descriptions for the applicable academic year: http://www.ucalgary.ca/pubs/calendar/)

**ReferenceText:** "Actuarial Mathematics," Bowers, Gerber, Hickman, Jones, Nesbitt, second edition, Society of Actuaries, 1997. (not necessarily a required text)

## Syllabus

#### **Topics**

Chapter 9 (9.1-9.5, 9.6.1, 9.7, and 9.9): Multiple Life Functions

Chapter 10 (10.1-10.4, 10.5-10.5.1, 10.5.4, 10.6): Multiple Decrement Models

Chapter 11 (11.1-11.3): Applications of Multiple Decrement Theory

Chapter 15 (15.6): Insurance Models Including Expenses

Time permitting, additional material from the chapters listed above and also from Chapter 16 may be included. If Chapter 16 material is included, it should not overlap any Chapter 16 material taught the term before in Actuarial Science 427 (i.e., the instructors should communicate with one another).

It is intended that this course should cover a portion of the syllabus for that part of the professional actuarial examination concerned with Life Contingencies. Currently, this corresponds to most of the material listed above from Chapters 6-9 and 15 that is on the syllabus for the Society of Actuaries Exam M, Life Contingencies Segment (MLC). This course syllabus should be updated as needed, with this objective in mind.

\* \* \* \* \* \*

January 19, 2010 DS:jcanape Effective Fall 2010