

**ACTU 357**  
Actuarial Mathematics II  
*Fall 2014*

- Instructor:** Dr. E. Duma, Office: LB 901-16 (SGW), Phone: 848-2424, Ext. 3064  
Email: ewa.duma@concordia.ca
- Schedule:** Tuesdays & Thursdays, 14:45-16:00, Room H 531 (SGW).
- Office Hours:** To be announced.
- Goal:** This course is a continuation of ACTU 257, and builds on the concepts and notation developed in that course. The course prepares for some of the topics of the Society of Actuaries and Casualty Actuarial Society.  
It is one of the two courses recognized by the Canadian Institute of Actuaries for an accreditation of the exam MLC.  
The following topics will be covered:  
- Benefit reserves  
- Multiple life functions  
- Multiple decrement models and applications  
- Insurance models including expenses and asset shares  
- Universal life
- References:** *Models for Quantifying Risk*, 5th Edition, by R. Cunningham, T. N. Herzog, and R. L. London, Society of Actuaries, 2012.
- Calculators:** The only calculators allowed in exams for this course are the battery- or solar-powered Texas Instrument calculators, models BA-II Plus\*, BA-II Plus, TI-30X, TI-30Xa (the official CAS calculator) or TI-30X II\*.
- Assignments:** There will be eight to ten assignments.
- Tests and Final:** First Test: Week 6  
Second Test: Week 10  
Final Exam: Examination period in December
- Grading:** The final grade will be determined as follows:  
Assignments: (5%)  
Class Exam 1: (25%)  
Class Exam 2: (25%)  
Final Exam: (45%)
- IMPORTANT:** THERE WILL BE NO SUPPLEMENTAL FOR THIS COURSE AND NO 100% OPTION FOR THE FINAL EXAM.