

ACTU 257
Actuarial Mathematics I
Winter 2024

- Instructor:** Dr. I. Cojocaru, Office: LB 1036 (SGW), Phone: 848-2424, Ext. 8656
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- Schedule:** Tuesdays & Thursdays, 14:45-16:00.
- Office Hours:** TBA.
- Goal:** This course introduces the student to the mathematical models for present values of claims contingent on some event, e.g. survival (Life) or sickness (Health). More specifically, the course focuses on the mathematics of life insurance and pensions. This course prepares for part of Society of Actuaries Exams FAM and ALTAM. This course is also required to apply to the Canadian Institute of Actuaries program exemption.
- Reference:** *Actuarial Mathematics for Life Contingent Risks*, 3rd Edition, by D.C.M. Dickson, M.R. Hardy, and H.R. Waters, Cambridge University Press, 2019.
- Calculators:** The only calculators allowed in exams for this course are the ones approved by the SOA/CAS exams: the Texas Instrument calculator models BA-35, BA-II Plus, BA-II Plus Professional, TI-30Xa, TI-30XII (IIS solar or IIB battery), TI-30XS MultiView (or XB battery). This rule will be strictly enforced.
- Grading scheme:** The final grade will be determined as follows:
Assignments: (10%)
Midterm exam: (40%)
Final Exam: (50%)

If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

There will be no make-up exams.

The final exam will be three hours long and will cover all the material in the course.

NOTE: Students are responsible for finding out the date and time of the final exams once the schedule is posted by the Examinations Office. Conflicts or problems with the scheduling of the final exam must be reported directly to the Examinations Office, not to your instructor.

NOTE: THERE WILL BE NO SUPPLEMENTAL FOR THIS COURSE AND NO 100% OPTION FOR THE FINAL EXAM.

Academic Integrity and the Academic Code of Conduct

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: <https://www.concordia.ca/conduct/academic-integrity.html>" [*Undergraduate Calendar, Sec 17.10.2*]

Behaviour

All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications.

Concordia students are subject to the [Code of Rights and Responsibilities](#) which applies both when students are physically and virtually engaged in any University activity, including classes, seminars, meetings, etc. Students engaged in University activities must respect this Code when engaging with any members of the Concordia community, including faculty, staff, and students, whether such interactions are verbal or in writing, face to face or online/virtual. Failing to comply with the Code may result in charges and sanctions, as outlined in the Code.

Intellectual Property

Content belonging to instructors shared in online courses, including, but not limited to, online lectures, course notes, and video recordings of classes remain the intellectual property of the faculty member. It may not be distributed, published or broadcast, in whole or in part, without the express permission of the faculty member. Students are also forbidden to use their own means of recording any elements of an online class or lecture without express permission of the instructor. Any unauthorized sharing of course content may constitute a breach of the [Academic Code of Conduct](#) and/or the [Code of Rights and Responsibilities](#). As specified in the [Policy on Intellectual Property](#), the University does not claim any ownership of or interest in any student IP. All university members retain copyright over their work.

Extraordinary circumstances

In the event of extraordinary circumstances and pursuant to the [Academic Regulations](#) the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the change.