

MAST 335
Investment Mathematics
Winter 2021

Preface: Due to exceptional circumstances, this course will be taught and all assessments will be done completely ONLINE.

Instructor: Dr. P. Gaillardetz
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Class Schedule: Mondays and Wednesdays, 13:15-14:30 (online).

Office Hours: Online via Zoom.

Goal: This course intends to introduce the student to the notion of interest (compound and simple) and the basic principles of financial mathematics. Topics covered include: accumulation and discount function using compound and simple interest, rate and discount, nominal interest rates, calculation of the present value of constant and varying annuities, amortization schedules, calculation of the outstanding balance of a debt at any point in time, assessing the amount of principle and interest and a payment, determination of the yield rate of an investment, sinking fund and calculation of the price and market value of a bond. Essentially, the first four chapters of the textbook will be covered.

Required Text: *Mathematics of Investment and Credit*, 7th Edition, by S.A. Broverman.

The textbook will be available at:

<https://www.bkstr.com/concordiastore/home>

Note: Students should order textbooks as early as possible, especially for printed versions in case books are backordered or there are any shipping delays.

Other Reference: *The Theory of Interest*, 2nd Edition, by S.G. Kellison, 1991.
Mathematics of Investment and Credit, 6th Edition, by S.A. Broverman.

Calculators: The only calculators allowed in exams for this course are either the Math and Stat approved calculators or 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*. For the list of approved calculators see:
<https://www.concordia.ca/artsci/math-stats/services.html#calculators>

Assignments: There will be five to seven assignments (Moodle).

Tests and Final: Midterm: Week 7 (Moodle)
Final Exam: Examination period in December (Moodle)

Grading: The final grade will be determined as follows:
Assignments: (20%)
Midterm: (35%)
Final Exam: (45%)

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

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: concordia.ca/students/academic-integrity." [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.

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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.