

**MAST 335**  
Investment Mathematics  
*Winter 2018*

**Instructor:** Dr. I. Groparu, Office: LB 1036 (SGW), Phone: 848-2424, Ext. 8656  
Email: ionica.groparu-cojocar@concordia.ca

**Class Schedule:** Mondays and Wednesdays, 13:15-14:30.

**Office Hours:** Mondays: 9:00-12:00.

**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.

**Reference:** *Mathematics of Investment and Credit*, 5th Edition, by S.A. Broverman, 2010.

**Other Reference:** *The Theory of Interest*, 2nd Edition, by S.G. Kellison, 1991.

**Calculators:** The only calculators allowed in exams for this course are either the Math and Stat approved calculators with the sticker 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\*.

**Assessment:**

- (a) **Assignments** counted for **10%**.
- (b) **Two Midterm Tests (15% each)** scheduled in **weeks: 6 and 10**.
- (c) **Final Exam** (remaining **60%**).

**Final Grade:** Will be based on the higher of  
**Option (A):** the weighted average of assignments (10%), the Midterms (30%) and of the Final Exam (60%), **or**  
**Option (B):** the weighted average of assignments (10%) and of the Final Exam (90%).

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 make-up tests.

**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](http://concordia.ca/students/academic-integrity)." [*Undergraduate Calendar, Sec 17.10.2*]