

## **ACT240H1F FUNDAMENTALS OF INVESTMENT AND CREDIT**

**PREREQUISITE:** MAT137Y (min 63%) or MAT157Y

**SECTION:** L101, Monday 10AM-12PM, Friday 10-11AM

**INSTRUCTOR:** S. Broverman

**OFFICE:** Sidney Smith Hall, Room 6016

**TELEPHONE/E-MAIL:** 416-978-4453 , sam@utstat.toronto.edu

**OFFICE HOURS:** Monday 1:30-3PM or by appointment

### **TEXTBOOK:**

**Required:** ACT240 + ACT245 COURSEBOOK

**Recommended:**

**Mathematics of Investment and Credit - S. Broverman, 4th edition  
(from the bookstore)**

**Check the course website (QUERCUS) for current announcements and updated course information.**

### **COURSE CONTENT:**

The course will cover Sections 1 to 11 or 12 of the Coursebook (Chapters 1 to 5 or 6 of Mathematics of Investment and Credit). It is essential that you have a financial calculator. The Texas Instruments BA II PLUS is the calculator allowed by the SOA and is recommended.

### **LECTURES AND TUTORIALS:**

The regular lecture time is Monday, 10AM to 12PM in SS2135 (Sidney Smith Building) and the regular tutorial time is Friday, 10AM to 11AM in your designated tutorial room. You should have been informed about which tutorial room you are in. The first tutorial will be Friday, Sept. 21. Each week some homework questions will be posted to the course website and solutions will be posted the following week. These will not be part of the course mark

## **SPECIAL NOTE ON LECTURES DURING TUTORIAL HOUR**

There will **not be** tutorials on Friday, Sept. 14, 28 and Nov. 16. On those dates there will be a lecture from 10AM to 11AM in Room 203 of the McLennan Physical Laboratory Building.

## **QUIZZES AND TERM TEST:**

**There will be occasional quizzes in tutorial and one term test. The 50 minute term test will take place in your tutorial room on Friday, Oct. 26 and is worth 30% of the course mark. Bring your U of T ID. Quizzes take place in the tutorial and are right/wrong with a right answer being worth 2% of the course mark, with a maximum of 10% for 5 quizzes with right answers.**

## **ABSENCE FROM TEST:**

**If you are absent from the test due to medical reasons provide a "Verification of Student Illness or Injury" to the instructor as soon as possible after the missed test, otherwise you will receive a mark of 0 for the test. The doctor visit must be dated no later than 1 day after the term test. Students who miss a term test will have the weight of the test shifted to the final exam.**

## **FINAL EXAM;**

There will be a 2-hour final examination worth 60% of the course mark. The final exam will be scheduled by the Faculty of Arts and Science to take place during the December exam period. There will be a tutor assigned to the Stat Aid Center for some hours prior to each of the term tests and final exam.

## **COURSE SYLLABUS**

Week 1	Effective Rates of Interest and Discount
Week 2	Nominal Interest and Discount, Force of Interest
Week 3	Annuities with Level Payments
Week 4	Annuities with Varying Payments (Geometric)
Week 5	Annuities with Varying Payments (Arithmetic)
Week 6	Loan Amortization (1)
Week 7	Loan Amortization (2)
Week 8	Dollar and Time Weighted Return
Week 9	Bond Valuation
Week 10	Bond Valuation and Amortization, Callable Bonds
Week 11	Term Structure of Interest Rates

