

# **ACT 349H1F (FALL 2021)** CORPORATE FINANCE FOR ACTUARIAL SCIENCE

## 1. Course Information:

Instructor: Jason Tome (jason.tome@utoronto.ca)

Office hours: TBD (By Appointment)

**Lecture:** Wednesdays from 2:00 to 5:00 p.m.

Delivery Method: In-person lectures in SS 2102 in certain weeks and online via zoom in

others (Details TBA on quercus)

**Teaching Assistant:** TBA (By Appointment)

Office hours: TBD (By Appointment)

## 2. Course Description

This course introduces students to analysis of financial planning and management with emphasis on capital structure, dividend payout policies, cost of capital, capital budgeting, risk and other special topics. The course serves as a framework for understanding a broad range of corporate financial decisions.

Canadian Institute of Actuaries (CIA)'s University Accreditation Program (UAP) ACT349 is an accredited course under the UAP program. The minimum grade needed to apply for an exemption is 75. For detailed information on UAP, please visit the following webpages:

University Accreditation Program description (https://www.cia-ica.ca/membership/universityaccreditation-program-home)

List of accredited courses offered by University of Toronto: https://www.ciaica.ca/membership/university-accreditation-program-home/accredited-universities/accrediteduniversity-detail?pav\_universityid=06f6b138-61e5-e511-80b9-00155d111030 How to apply for CIA exemptions: https://www.cia-ica.ca/membership/university-accreditation-

program-home/information-for-candidates/obtaining-uap-credits

Note: The CIA will grant credits to students for SOA/CAS examinations based on the achievement of the minimum Grade towards Associateship (ACIA) and Felllowship (FCIA) in the CIA. At the time of this agreement, CIA credits are recognized by the following actuarial organizations towards their respective designations:

Casualty Actuarial Society (CAS): ACAS, FCAS UK Institute and Faculty of Actuaries (IFoA): FIA, AIA Institute of Actuaries of Australia (IAA): AIAA, FIAA Actuarial Society of South Africa (ASSA): AMASSA, FASSA American Academy of Actuaries (AAA): MAAA

The CIA does not guarantee that credits granted to students under the CIA UAP will be recognized by any other actuarial organizations towards their actuarial designations.

## 3. Course Objectives

Upon successful completion of this course, students will be able to:

- Explain financial markets and functions of corporate finance.
- Calculate and Interpret time value of money.
- Estimate bond prices and identify factors that affect bond prices.
- Estimate the value of a common stock and determine if it is under or overpriced.
- Calculate different components of cost of capital.
- Understand and evaluate capital budgeting decision rules and explain how real options affect these decisions.
- Classify and distinguish various types of risk and their relation to portfolio choice
- Describe and calculate a firm's capital structure.
- Interpret how leverage and firm value are related.
- Explain how a firm's dividend policy is set and how it affects firm value.
- Understand leasing decisions.

#### 4. Course Textbook & Calculator

**Title**: Fundamentals of Corporate Finance (2019)

**Edition**: 10<sup>th</sup> Canadian Edition

**Authors**: Stephen A. Ross, Randolph W. Westerfield, Bradford D. Jordan, Gordon Roberts, J. Ari Pandes, Thomas Holloway

**Calculator:** The use of a hand-held financial calculator that has Time Value of Money functions is **strongly recommended** for this course. I recommend the Texas Instruments BAII Plus, as this is used in the textbook and lectures to demonstrate examples. The use of any other non-programmable calculator will also be permitted for quizzes and exams.

#### 5. Evaluation

## a) Term Test #1 and Term Test #2 (25% each, for a combined total of 50%)

- a. Questions: Combination of Short Answer & Multiple Choice Questions.
- b. **Duration:** 2 hours will be allotted.
- c. Date / Time / Location: See "Course Schedule" section below.
- d. Important: See "Exam Rules & Academic Integrity" section below.

## a) Final Exam (50%)

- a. **Questions:** Combination of Short Answer & Multiple Choice Questions.
- b. **Duration:** 2 hours will be allotted.
- c. Date / Time / Location: Will be announced once they are available.
  - d. Important: See "Exam Rules & Academic Integrity" section below.

## 6. Exam Rules & Academic Integrity

- All exams (i.e. Test 1, Test 2, and Final Exam) are **closed book** examinations.
- Dictionaries are **not** allowed into the examinations.
- Formula sheets will be provided for each exam.
- Only <u>non-programmable calculators</u> will be allowed into the exams. If you are unsure, please ask the Instructor to check your calculator.
- Bring student identification (i.e. ID cards) to exams.
- Nothing is to be on/at one's desk during an exam except pencil, eraser, nonprogrammable calculator and the individual's student card.
- Do not wear caps / hats to the exams.
- Do not bring electronic devices to the exams.
- Students are required to complete <u>all components</u> of this course. There are no
  exceptions to this. Extra assignments to improve grades will <u>not</u> be allowed.
- Exams may be scored using a special program which examines the answer sheets for unusual coincidences in the pattern of answers given which may be indicative and used as supporting evidence of cheating.
- Grades will <u>not</u> be adjusted on the basis of need. It is important to monitor your performance in the course. Remember: <u>You</u> are responsible for <u>your</u> grades in this course.
- There are <u>no make-up term tests</u>. However, if you miss a term test, and you can provide me with one of the following: a U of T Verification of Illness or injury form (<u>www.illnessverification.utoronto.ca</u>), or an Accessibility Services letter, or a letter from your college registrar about personal matters interfering with your studies, **by the day** after the term test at the latest, your missed term test weight will be shifted to the final exam (i.e. if you missed a 20% term test, your final exam will be worth 60%). This "shifting" may be done after comparing and adjusting the class average of the missed test and final exam to ensure fairness to all students. You will be informed of that adjustment should it happen.
- There will be ONE make-up final exam arranged by Faculty of Arts and Science directly.
- In addition to the specific university's internal policies on conduct, including academic
  misconduct, candidates pursuing credits for writing professional examinations shall also
  be subject to the Code of Conduct and Ethics for Candidates in the CIA Education
  System and the associated Policy on Conduct and Ethics for Candidates in the CIA
  Education System. For more information, please visit information for candidates
  on obtaining UAP credits.

## 7. Course Schedule

Topic
Lecture #1: Introduction to Corporate Finance (Chapter 1), Time Value of Money (Chapter 5), Discounted Cash Flow Valuation (Chapter 6), Interest Rates & Bond Valuation (Chapter 7), and Stock Valuation (Chapter 8)
Lecture #2: Financial Statements, Cash Flow, & Taxes (Chapter 2), Working with Financial Statements (Chapter 3), Long-Term Financial Planning & Corporate Growth (Chapter 4), and Net Present Value & Other Investment Criteria (Chapter 9)
Lecture #3: Making Capital Investment Decisions (Chapter 10), and Project Analysis & Evaluation (Chapter 11)
Term Test #1 (During Lecture)
Lecture #4: Lessons from Capital Market History (Chapter 12), and Return, Risk, & the Security Market Line (Chapter 13)
Lecture #5: Cost of Capital (Chapter 14)
Lecture #6: Raising Capital (Chapter 15)
Lecture #7: Financial Leverage and Capital Structure Policy (Chapter 16)
READING WEEK – NO LECTURE
Term Test #2 (During Lecture)
Lecture #8: Valuation & Capital Budgeting for the Levered Firm
Lecture #9: Dividends and Dividend Policy (Chapter 17)
Lecture #10: Leasing (Chapter 22), and Options and Corporate Securities (Chapter 25)
Final Examination