ACT349 - Corporate Finance for Actuaries

Vital Statistics:

Instructor: Vicki Zhang, FSA, ACIA, CERA, MStat (with completion of PhD

qualification exams)

Lectures: Wednesdays, 2-4pm (Except for term test dates, see below)

Lecture location: UC179

Tutorials: Wednesdays, 4-5pm, no tutorial in the first week.

Tutorial location: UC179 and UC177 Office Hour: Tuesdays, 4:15-6:15pm Office: 6th floor, SS Room 6027A

TA office hour:

Blackboard: http://portal.utoronto.ca
Email: vickijing.zhang@utoronto.ca

Textbook:

Corporate Finance, 7th Canadian Edition (2015) By Stephen Ross, Randolph Westerfield, Jeffrey Jaffe, Gordon Roberts



The textbook is available for purchase at UofT book store and other popular online outlets. It is also on course reserve at Robarts Library. However, it is required that you acquire a copy of the textbook.

Calculator:

You will need a non-programmable financial calculator for this course.

Evaluation:

5% One 1-page research brief

10% One 2-page "Modified" Op-Ed article **OR** participation in one of three in-class debate team

20% Term Test 1

25% Term Test 2

40% Final Exam

Research brief: I will announce bite-sized, open-ended research topics immediately related to the course materials throughout the semester. You should pick one (and only one) of those topics and write a 1-page research brief.

Topics include stories of historical market crashes, lessons learned from the recent financial crisis, real-world examples of irrational investment behaviors, real-world examples of bubbles theory, etc. The audience of your research brief is your course instructor and TAs. The turnaround time for research brief is five to six days (i.e. due before the next lecture). Grading rubrics will be provided.

In-class debate:

There will be three opportunities for an in-class mini-debates. Four debaters for each topic, two debaters each on the affirmative and opposing team. Debate team sign-up will be announced three times in the semester and the sign-up policy is first-come-first-serve. The mini-debate format is as follows: Opening statements (4 minutes each), timed rebuttal (2 minutes each), moderated cross examination (5 minutes in total). Debate topics are immediately related to the course materials.

Tentative topics are:

- (1) Be it resolves, the capital market is efficient;
- (2) Be it resolved, more debt in the capital structure is beneficial to the firm;
- (3) Be it resolved, firm managers should pay more dividends to shareholders.

"Modified" Op-Ed article:

This exercise is for all the non-debaters. Debaters do not need to write an Op-Ed. Non-debaters should pick one (and only one) of the debate topics to write a two-page Op-Ed article. To encourage pluralistic thinking, you should write the first part of the article in the "believing" mode (theories and evidence supporting the motion) and second part in the "doubting" mode (theories and evidence opposing the motion). You may certainly express your personal opinions on the motion as long as you present both sides. Research beyond the textbook is highly encouraged.

Your audience/reader of the Op-Ed are the general public, and therefore you should strive in your writing to be as reader-friendly and jargon-free as possible. More detailed requirements and grading rubrics will be provided.

Bonus points opportunities (to be applied to final course mark):

In-class questions using Poll Everywhere (up to 5% bonus points): For each question that is answered correctly, you are awarded 0.5 point. If the question is open-ended, you receive 0.5 point for participation. All participation is voluntary but strongly recommended. Bonus points will be awarded and accumulated from week 3 (although I will only post the total bonus points at semester's end).

To celebrate great work, there will also be a possibility of creating an e-zine (published online) for the best research brief and Op-Ed articles, as well as for debate footage/audio clip.

Estimated Weekly Schedule of Topics:

Lecture - September 14

- The "puzzles" we will tackle in this course
- Poll Everywhere test-run
- Overview of corporate finance

No tutorial in the first week.

Part One: Capital Budgeting Decisions

Lecture - September 21:

- Puzzle #1: how should firms make decision on whether to invest in a project?
- Six rules of capital budgeting (Chapter 7): NPV, Payback period, Discounted payback period, Average accounting return

Tutorial – September 21

- Complete Poll Everywhere registration

Lecture - September 28:

- Six rules of capital budgeting continued (Chapter 7): Probability index, IRR
- More on NPV method (Chapter 8)

Lecture – October 5:

- Advanced techniques for capital budgeting (Chapter 9): Decision tree, sensitivity analysis, scenario analysis, break-even analysis, Monte-Carlo

Tutorial October 12 – Term test 1 (50 minutes, 2:10-3pm), covering materials of Chapter 7 and 8

Lecture - October 12:

- Advanced techniques for capital budgeting continued (Chapter 9): Real-options
- Risk and Return (Chapter 10)

Lecture - October 19:

- Capital Asset Pricing Model (CAPM) (Chapter 11)

Tutorial October 19 - Term test 1 review

Mini-debate #1 sign-up this week (more instructions to follow), you will have two weeks to prepare.

Lecture - October 26:

Apply CAPM in capital budgeting (Chapter 13)

Part Two: Capital Financing Decisions: Can financing decision create values for a firm?

Lecture - November 2:

- Puzzle #2: Can managers time the issues of securities or engage in market speculation in order to create value for a firm? (Chapter 14)
- Mini-debate #1: Be it resolved, capital market is efficient
- Efficiency market theorem vs. Behaviorists

November 7: Last day to drop class.

Tutorial November 9 – Term test 2 (50 minutes, 2:10-3pm), covering materials of Chapter 7, 8, 9, 10, 11, 13

Lecture - November 9:

- Puzzle #3: Can managers create a special mix of debt and equity that creates value for the firm?
- Capital Structure (Chapter 16)

Mini-debate #2 sign-up this week (more instructions to follow), you will have two weeks to prepare.

Lecture - November 16:

- Put capital budgeting and capital financing together: capital budgeting for a *levered* firm (Chapter 18)

Tutorial November 16 - Term test 2 review

Mini-debate #3 sign-up this week (more instructions to follow), you will have two weeks to prepare.

Lecture - November 23:

- Mini-debate #2: Be it resolved, more debt in the capital structure is beneficial to the firm
- Back to puzzle #3, but with real-world considerations Limits to the use of debt (Chapter 17)

Part Three: Dividend Policy

Lecture - November 30:

- Puzzle #4: why do firms choose to pay dividends (or not)?
- Mini-debate #3: Be it resolved, firm managers should pay more dividends to shareholders
- Dividend policy (Chapter 19)

Final Exam - Date TBA, will be announced on portal

Missed Assignments or Exams

- There are no make-up research briefs, Op-Ed articles, in-class debates.
- There is no make-up for in-class bonus questions.
- There are no make-up term tests. However, if you miss a term test, and you can provide me with one of the following: a UofT Verification of Illness or injury form (www.illnessverification.utoronto.ca), 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.

A Word on Recommendation Letter Request

If you request a recommendation letter from me in the future based on this course, you need to meet the following criteria:

- (1) your final course grade is at least 80%; AND
- (2) you participated as a debater and performed reasonably well, OR your Op-Ed received at least 8% or was selected into the "best Op-ed" collection, OR your research brief was selected into the "best research brief" collection.

The reason for the second criterion is that to write a customized recommendation letter that will have any impact to your application, I will need to have some performance data that is beyond a numeric course grade. In a large-classroom course like this one, your debate/Op-ed performance provides me with some basis to comment on your research, communication, critical thinking, and creative skills. Those are the characteristics that are required to be commented upon in a recommendation letter.