

ACT245 – Financial Principals I
Winter Term, 2014

Prerequisite:

ACT240H1, MAT137Y1 (minimum grade 65%)/MAT157Y1

Vital Statistics:

Instructor: Vicki J. Zhang, FSA, MAAA, ACIA, MStat

Lectures: Tuesdays, 1-3pm

Lecture location: LM159

Tutorials: Thursdays, 2-3pm (Starting from the second week of classes)

Tutorial Location: See Course Portal Announcement section for your assigned location

Office: 6th floor, SS Room 6015

Office Hour: TBA

Blackboard: <http://portal.utoronto.ca>

Email: vickijing.zhang@utoronto.ca

Evaluation:

5% In-class quizzes

10% Class discussion and presentation on assigned readings (6%) and 1-page individual reflection paper based on the same readings (4%)

30% 1-hour mid-term exam

55% final exam

Texts and Reference:

The main textbook we will use for this course is Broverman's Study Guide for SOA EXAM FM/ CAS EXAM2.

I have also asked the library to put the following reference book on the course reserve:
Derivatives Markets by Robert L. McDonald. You are not required to purchase this book.

Schedule of Topics:

Lecture 1 – January 7:

- Introduction to financial derivatives
- Concept of arbitrage
- Forward contract

Lecture 2- January 14:

- Synthetic forward contract
- Futures contract

January 19: Last day to add a course

Lecture 3- January 21:

- Term structure of interest rate

- Forward rate of interest

Lecture 4- January 28:

- Duration and immunization

Lecture 5- February 4:

- Introduction to Swaps

Lecture 6- February 11:

- Swaps - continued
- Introduction to Options

February 18: Reading week, no class. Assigned readings will be posted on portal.

Lecture 7- February 25:

- Moderated reading on assigned paper 1 – commodity future trading and its socioeconomic impact
- Team-based learning: discussion in teams, jigsaw reading and class presentation

Feb 27 – Midterm (in tutorial hour)

- Cover materials in Broverman's Section 14, 15, 19
- Materials in the assigned papers are not covered in midterm

Lecture 8- March 4:

- Moderated reading on assigned paper 2 – futures, currency swap and emerging economy
- Team-based learning: discussion in teams, jigsaw reading and class presentation

March 9: last day to drop a course

Lecture 9- March 11:

- Moderated reading on assigned paper 3 – Credit Default Swap and financial crisis
- Team-based learning: discussion in teams, jigsaw reading and class presentation

Lecture 10- March 18:

- Option strategy I

Lecture 11- March 25:

- Option strategy II

Lecture 12- April 1:

- Measures of rate of return on a fund
- Recap key concepts and formula for the final exam

Final Exam – Date TBA

- Covers all the math questions we covered in the course

Missed Assignments or Exams

- If you miss exams due to medical, family or other reasons, you have to provide documentation to me. The acceptable types of medical documentations are: UofT Verification of Illness or Injury Form, Student Health or Disability Related Certificate, A College Registrar's Letter, or Accessibility Services Letter. The Faculty of Arts and Science require the student who misses an exam to come forward to the course instructor no later than one week of the exam.
- There is no make-up assignment
- There will be **one** make-up mid-term test (Date is TBA).
- There will be **one** make-up final test arranged by Faculty of Arts and Science directly.