

Corporate Finance

The objective of this course is to provide an introduction to the fundamental principles of asset valuation, investment and financing decisions of firms. The main topics covered in class include time value of money, diversification, risk and return, capital budgeting principals, corporate financing decisions, and introduction to options and futures.

Course Materials

- Required textbook:

- *Principles of Corporate Finance*, 10th edition, by Richard Brealey, Stewart Myers, and Franklin Allen; McGraw-Hill

The book contains assigned readings for the course and may prove useful in future courses. Note that the assigned reading should be completed prior to the class for which it is scheduled.

- Recommended:

- *Solutions Manual* to practice questions in the textbook

If you find it helpful to see the material presented in different ways, I also recommend the following textbooks:

- *Corporate Finance* by J.B. Berk and P.M. DeMarzo
- *Corporate Finance* by S.A. Ross, R.W. Westerfield and J.F. Jaffe

- Slides posted on the course web site

These slides have been designed to accompany the lectures. As a suggestion, you may want to print them out and bring them to each lecture to ease note taking.

- Practice problem sets

Problem sets (and their solutions) will be posted on the course web site. Although problem sets are not graded, they are strongly recommended, and you should treat them as if they were assigned. It is important that you try the problems before you see the solutions, otherwise the exam will be the first time you have to solve a problem without any additional help.

Canvas Course Page

All course information (syllabus, lecture slides, problem sets, office hours, course announcements, etc.) will be made available via the Canvas course site.

Evaluation

Your grade for the course will be based on two in-class midterm exams, a final exam, and class participation. The course grade is determined as follows:

$$\text{Grade} = 0.10 * \text{Participation} + 0.25 * \text{Midterm1} + 0.25 * \text{Midterm2} + 0.40 * \text{Final}$$

All exams are **cumulative**, closed-books and closed-notes (you will be provided with a formula sheet only; no self-made “cheat sheets” are allowed). All you should bring is writing utensils and a calculator; laptops are not allowed. To account for any differences in difficulties across exams, midterm and final scores will be standardized when computing the course grades.

Midterm schedule is specified on the last page of the syllabus. The date and the place of the final exam are determined by the university and, once announced, will be posted on the course web page.

Class Participation

I expect you to attend every class, come prepared and participate actively (and voluntarily) during lectures. In addition, I reserve the right to cold-call on students, particularly on those who have not participated in a while.

Regrading Policy

There are no verbal appeals of grades. You must provide a written statement as to where and why there is a problem. All regrade requests must be submitted within one week (not later!) of the class meeting the exams are returned. Importantly, the entire exam will be regraded. As a result, the overall score may increase, remain the same, or decrease, and no subsequent appeals are accepted.

Make-up Policy

Make-up exams are only given in exceptional circumstances such as serious illness or family emergency (evidence of which must be provided). Since midterms are in-class and their dates are pre-specified in the syllabus, it is expected that students adjust their schedules (i.e., attending your cousin’s wedding or job interview are not valid excuses for missing an exam). The make-up midterms (for students who obtained my permission) will be held on Friday, April 12 at noon (location TBA). Note also that there will be no make-up final except as required by university policy, in which case you have to obtain a permission from the dean’s office.

Class Attendance and Rules

Students are **required** to attend sections for which they are registered. If you want to switch to some other section, you have to drop your current section and officially enroll in the other. If some emergency forces you to miss a class, you should obtain my permission to attend another section that day. Absolutely, no switching will be allowed on a midterm day. Students are expected to arrive in class on time and remain until the class is completed.

All cell phones and electronic devices (including laptops) must be turned off and out of sight during class (failure to comply with this rule will affect your class participation grade and may result in dismissal from the class).

Academic Integrity

Academic honesty is expected. An act of dishonesty, such as cheating of any form, will lead to grade penalties or failure. In addition, all cheating incidents are reported to the Office of Student Conduct.

Course Outline

- 1 Discounting:** intuition and basic mechanics associated with the time value of money, present and future values, compounding effect, perpetuities and annuities

Assigned Reading: Chapters 1 & 2

- 2 Bond Valuation:** valuation of discount and coupon bonds, yield to maturity, term-structure of interest rates, real and nominal interest rates, spot and forward rates

Assigned Reading: Chapters 3, 24.1–24.5

- 3 Valuation of Stocks:** valuation of equity securities, dividend yields and price/earnings multiples

Assigned Reading: Chapters 4, 15

- 4 Portfolio Analysis and Diversification:** risk and return, asset allocation and diversification, practical aspects of diversification

◇ Assigned Reading: Chapters 7.2-7.3, 7.5, 8.1, Review notes on basic statistics and utility

- 5 Asset Pricing Models:** Capital Asset Pricing Model (CAPM), covariance and variance risks, systematic and idiosyncratic risks

Assigned Reading: Chapters 7.4, 8.2–8.4

- 6 Investment Decisions and Capital Budgeting:** net present value rule (NPV), alternative evaluation techniques and their pitfalls

Assigned Reading: Chapters 5 & 6

- 7 Financing Decisions – Leverage and WACC:** Modigliani and Miller propositions with and without corporate taxes, optimal capital structure and market frictions

Assigned Reading: Chapters 14, 17, 18, 19.1, 19.3

- 8 Forwards and Futures:** overview of forward and futures contracts, forward prices and valuations, hedging and speculation

Assigned Reading: Chapters 26.1, 26.4

- 9 Options:** overview of option contracts, put-call parity, hedging and speculation

Assigned Reading: Chapter 20, 26.3

Class Schedule

Lecture	Date	Topic
1	Jan. 09	Introduction and Discounting
2	Jan. 14	Discounting
2	Jan. 16	Discounting
3	Jan. 23	Bond Valuation
4	Jan. 28	Bond Valuation
5	Jan. 30	Bond Valuation
6	Feb. 04	Valuation of Stocks
7	Feb. 06	Valuation of Stocks
8	Feb. 11	Portfolio Analysis and Diversification
9	Feb. 13	<u>Midterm 1</u> (on everything covered up until the midterm date)
10	Feb. 18	Portfolio Analysis and Diversification
11	Feb. 20	Portfolio Analysis and Diversification
12	Feb. 25	Asset Pricing Models
13	Feb. 27	Asset Pricing Models
14	Mar. 11	Asset Pricing Models
15	Mar. 13	Investment Decisions and Capital Budgeting
16	Mar. 18	Investment Decisions and Capital Budgeting
17	Mar. 20	Financing Decisions
18	Mar. 25	Financing Decisions
19	Mar. 27	<u>Midterm 2</u> (on everything covered up until the midterm date)
20	Apr. 01	Financing Decisions & Forward and Futures Contracts
21	Apr. 03	Forward and Futures Contracts
22	Apr. 08	Forward and Futures Contracts
23	Apr. 10	Option Contracts
24	Apr. 15	Option Contracts
25	Apr. 17	Option Contracts
26	Apr. 22	Review for the Final