Econ 175: Financial Investments

Class Web-page:

http://econ.ucsd.edu/~ikomunje/ec175course.htm

Class Time:

Thursday, 5:00 PM - 7:50 PM in Center Hall 101 (see weekly schedule)

Problem Sessions:

Friday, 5:00 PM - 5:50 PM in Center Hall 105 (see weekly schedule)

TAs and Office Hours:

Chao Cong [ccong@ucsd.edu], 9:30 AM to 10:30 AM on Thursdays in SH 237 Hiroaki Kaido [hkaido@ucsd.edu], 9:00 AM to 10:00 AM on Tuesdays in Econ 115 Min Seong Kim [msk003@ucsd.edu], 4:00 PM to 5:00 PM on Mondays in Econ 117

During exam preparation weeks (Week 6 and Week 10) all the office hours will be doubled. Prof. Komunjer will hold her office hours 4:00 PM to 5:00 PM on Thursdays in Econ 226.

E-mail Policy:

If you have questions about class material/lecture notes/problem sets or any other comments/suggestions related to the class, the problem sessions and office hours are here for you to ask those. We prefer answering your questions directly so please refrain from e-mailing us. We will be more than happy to assist you in person.

Required text:

Investments, by Zvi Bodie, Alex Kane and Alan J. Marcus, Irwin McGraw-Hill.

Recommended texts:

Investments, by Charles P. Jones, John Wiley & Sons, Inc. *Options, Futures and Other Derivatives*, by John C. Hull, Prentice Hall.

Overview:

This course is an introduction to financial markets and the corporate management. The aim is to provide a basic understanding of the important financial assets available in the capital markets as well a basic knowledge of corporate financial management problems. The primary goal of this course is to impart the knowledge to allow you to intelligently solve practical business problems and/or pursue with more advanced studies in finance. To achieve this goal, it is crucial that you have a sound understanding of finance theory. As such, the course will be theoretical in nature, often requiring rigorous quantitative analysis.

Pre-requisites:

Econ 120A - Econometrics

A good knowledge of probability theory and statistics is essential for understanding finance. All Econ 175 students are expected to be familiar with notions such as: random variable, stochastic process, filtration, martingale, distribution function, expectation, variance, covariance. For those of you who hesitate about any of the above, make sure you read the

Probability Theory Review (c.f. lecture notes for Econ 175). Alternative reference is Lectures in Elementary Probability Theory and Stochastic Processes by Falmagne, Jean-Claude, McGraw-Hill, 2003, ISBN: 0072448903.

An introductory course in Economics is strongly recommended though not officially required as a pre-requisite for Econ 175. Students not familiar with microeconomic concepts such as: consumer choice, classical demand theory, production, choice under uncertainty, competitive markets or general equilibrium under uncertainty are advised to revise their course choice strategy and/or do some intensive reading in Microeconomic Theory at the beginning of the course (e.g. Ch 1-6; 10; 19 in Microeconomic Theory by Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green, Oxford University Press, 1995, ISBN: 0195073401).

Additional material:

Every participant should have a scientific calculator performing basic mathematical operations at her/his disposal. No specific financial calculator is required for this course.

Readings:

You should always reinforce the lectures by using the suggested textbook material. You will notice that some important topics will be covered in great detail in class (e.g., CAPM, options). In this case the textbook readings simply reinforce the lectures. Since time does not allow us to cover most topics in this way, the suggested textbooks present some of the material that is not covered during lectures. You are responsible for all the assigned material covered in the lecture notes, regardless of whether I have time to cover it in class. Reading ahead is encouraged, as it will aid your understanding of the material presented in class. Re-reading after class is also encouraged, as it will help solidify the new concepts just presented.

Problem Sessions:

The problem sets related to the covered material will be worked during the problem sessions of the week they are presented in class. Participation in problem sessions is not compulsory though strongly advised as:

- (1) your TA will cover some of the material not presented in class,
- (2) you will be solving problem sets which are closely related to the contents of your midterm/final exam,
- (3) you can ask questions related to the problem set in class.

Additional problems can be found at the end of every chapter of the recommended textbooks. If you are at all concerned about this class, I strongly suggest that you always participate in the problem sessions.

Exam and Grading Policy:

The midterm and final exams must be taken on the scheduled dates. Both exams are graded out of 100 points—your letter grades are curbed. In case of absence during an exam, you will be assigned 0 points for this exam. The only exceptions are absences dues to:

- (1) officially sanctioned university events;
- (2) unforeseen and officially documented illness, accident or family crisis.

The midterm exam is in—class and is 2h long; the final exam is a 3h exam. No textbooks/lecture notes are allowed during midterm/final exam. However, you may use a hand-written 1 (one) page single—sided "cheat-sheet" for your midterm exam; for your final exam, you may use a hand—written 1 (one) page double—sided "cheat-sheet".

Midterm Exam (Chapters 1 - 10): **Thursday, February 16, 5:00 PM – 7:00 PM**Final Exam (Chapters 1 - 17): **Monday, March 20, 7:00 PM – 10:00 PM**

Your final grade will be determined by your performance on the midterm exam and the final exam. The actual formula according to which you grade is determined is:

Max{(40% of Midterm Exam + 65% Final Exam), (100% Final Exam)}

Weekly Schedule

| WEEK | SESSION | DATE | COURSE TITLE / CHAPTER | PROBLEM SET |
|---------|-------------|------------------|---|---------------|
| WEEK 1 | Session 1: | Thursday, Jan 12 | Introduction to the Financial Environment / Ch 1 Financial Markets / Ch 2 | n/a |
| WEEK 2 | Session 2: | Thursday, Jan 19 | Financial Instruments / Ch 3 Fixed Income I / Ch 4 | n/a |
| WEEK 3 | Session 3: | Thursday, Jan 26 | Fixed Income – An Application / Ch 5 Fixed Income II/ Ch 6 | Problem Set 1 |
| WEEK 4 | Session 4: | Thursday, Feb 02 | Options I / Ch 7 Options II / Ch 8 | Problem Set 2 |
| WEEK 5 | Session 5: | Thursday, Feb 09 | Options III / Ch 9 Options IV / Ch 10 | Problem Set 3 |
| WEEK 6 | Session 6: | Thursday, Feb 16 | Midterm exam | n/a |
| WEEK 7 | Session 7: | Thursday, Feb 23 | Portfolio Choice Theory I / Ch 11 Portfolio Choice Theory II / Ch 12 | Problem Set 4 |
| WEEK 8 | Session 8: | Thursday, Mar 02 | Portfolio Choice – Application / Ch 13 | Problem Set 5 |
| WEEK 9 | Session 9: | Thursday, Mar 09 | CAPM I / Ch 14 CAPM II / Ch 15 | Problem Set 6 |
| WEEK 10 | Session 10: | Thursday, Mar 16 | CAPM III / Ch 16 Market Efficiency / Ch 17 | Problem Set 7 |
| WEEK 11 | Final exam: | Monday, Mar 20 | 7:00 PM – 10:00 PM. | n/a |