ECO573: Financial Economics
(Economics of Uncertainty and Finance)
Fall 2014
Professor Eduardo Perez

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Course Description. This course is an introduction to the economics of financial markets. The first part of the course (lectures 1-5) leads to an equilibrium model of asset pricing. In the process it introduces interest rates, preferences under uncertainty, the portfolio choice problem, measures of risk, Aumann’s partitional model of asymmetric information, and a no-trade theorem (Milgrom and Stokey’s). The second part of the course introduces the CAPM (Capital Asset Pricing Model) as a particular case of the equilibrium approach. As an application, I provide an introduction to corporate finance based on CAPM. The third part of the course is devoted to more advanced topics. The first lecture extends the equilibrium model of the first part to a fully dynamic setting, and then introduces the workhorse microstructure models of trading of Glosten and Milgrom, and Kyle. The second and last lecture is devoted to a basic introduction of the continuous time option pricing model of Black, Scholes and Merton.

Assignments and Exam. The final exam is on Friday, November 28, from 9am to 12am. On the webpage of the course, you will find a problem set that corresponds to each lecture. We will use these problem sets as a basis for exercises that we will solve in the exercise sessions. I will assign two problem sets as homework during the quarter. The homework can be done in groups of up to 3 students, but each member of the group must write their own problem set. If you work in group, mention the people you worked with on your homework. These assignments will be graded. There is a unique three hours final exam at the end of the course. The exam is open book.

Grade. The course grade is computed the maximum of two grades. The first of these grades puts the following weights: 70% on the final exam, 25% on the problem sets, and 5% on oral participation. The second of these grades is: 80% on the final 15% on the exams and 5% on oral participation.

Organization. The class meets every Friday from 8:30am-12:15pm. This time is divided between a lecture and an exercise session during which we solve some of the problem set exercises. The exact timing will depend on the topic. The slides of the lecture and corresponding problem set will be posted in advance on the website of the course. The lectures are organized as follows.
-Lecture 1: Introduction to Finance. (September 12)
-Lecture 2: Term structure of interest rates. Determinants of interest rates. (September 19)
-Lecture 3: Choice under uncertainty. (September 26)
-Lecture 4: Consumption based asset pricing. (October 3)
-Lecture 5: Equilibrium asset pricing. Homework 1 due. (October 10)
-Lecture 6: Beta factor models, mean variance and CAPM. (October 17)
-Lecture 7: Corporate Finance. (October 24)
-Lecture 8: Dynamic asset pricing. Introduction to microstructure. Homework 2 due. (November 7)
-Lecture 9: Option Pricing. (November 21)

Textbooks. There is no mandatory textbook for this course. The following books are a good complementary reading, but they are by no means necessary. First a list of graduate level textbooks. They generally go beyond the level of this course but they are an excellent reading if you want to deepen your understanding of the theory.


Second a list of MBA/undergraduate textbooks. They are an excellent reading if you want to familiarize yourself with financial terminology, institutions and practice.

1. “Investments,” by Zvi Bodie, Alex Kane and Alan J. Marcus.