

## Econ 173A: Financial Markets (sections A and B)

**Ted course page:**

<http://ted.ucsd.edu>

**Class Time:**

Section A: Tuesday/Thursday, 12:30 PM - 1:50 PM in CSB 001  
Section B: Tuesday/Thursday, 2:00 PM - 3:20 PM in CSB 001

**Discussion Classes** (see weekly schedule):

Section A: Monday, 6:00 PM - 6:50 PM in WLH 2204  
Section A: Monday, 7:00 PM - 7:50 PM in WLH 2204  
Section B: Wednesday, 6:00 PM - 6:50 PM in SEQUO 148  
Section B: Wednesday, 7:00 PM - 7:50 PM in SEQUO 148

**TA and Office Hours:**

Xu Zhang [xuz039@ucsd.edu], Thursday 3:30 PM – 4:30 PM in SH 233  
Michael Levy [mjlevy@ucsd.edu], Monday 3:00 PM – 4:00 PM in SH 208  
Professor Komunjer: by appointment in ECON 226

**E-mail Policy:**

If you have questions about the class material/lecture notes/problem sets or any other comments/suggestions related to the class, you can e-mail us at [econ173a@ucsd.edu](mailto:econ173a@ucsd.edu). We shall do our best to respond promptly. Please be advised that we created discussion sessions and office hours so we can answer your important and immediate questions in person.

**Recommended texts:**

*Investments*, by Zvi Bodie, Alex Kane and Alan J. Marcus, Irwin McGraw-Hill.  
*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 portfolio choice. The aim is to provide a basic understanding of the important financial assets available in the capital markets as well a basic knowledge of portfolio 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:**

*ECON100A (Microeconomics A) or ECON170A (Management Sci Microecon A)*

An introductory course in Economics is required as a pre-requisite for Econ 173A. Students should refresh their knowledge of important microeconomic concepts such as: consumer choice, classical demand theory, production, choice under uncertainty, competitive markets or general equilibrium under uncertainty.

*ECON120B (Econometrics B) or MATH181A (Intro/Mathemat Statistics I)*

A good knowledge of probability theory, statistics and regression models is essential for understanding finance. All Econ 173A students are expected to be familiar with notions such as: random variable, distribution function, expectation, variance, covariance, linear regression model, heteroskedasticity, and serial correlation.

*MATH20F (Linear Algebra) or MATH31AH (Honors Linear Algebra)*

A good knowledge of Linear Algebra is essential for a successful completion of this course. In particular, the second part of the class which deals with optimal portfolio choice problem requires a good knowledge of matrix algebra.

### **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 are responsible for all the assigned material covered in the lecture notes and problem sets, 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. Though not required, you may reinforce the lectures by using the suggested textbook material.

### **Discussion Sessions:**

The problem sets related to the covered material will be worked during the problem sessions of the week they are presented in class. During discussion sessions:

- (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 discussion sessions.

### **Exam and Grading Policy:**

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

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

The midterm exams are in class and are 1h 20min; the final exam is a 3h exam. No textbooks/lecture notes are allowed during midterm/final exams. However, you may use a hand-written 1 (one) page single-sided “cheat-sheet” for your midterm exams; for your final exam, you may use a hand-written 1 (one) page double-sided “cheat-sheet”.

Midterm Exam I:	<b>Tuesday, October 28</b>
Midterm Exam II:	<b>Thursday, November 20</b>
Final Exam:	Section A: <b>Friday, December 19</b> , 11:30 AM--2:29 PM (Room TBA) Section B: <b>Thursday, December 18</b> , 3:00 PM--5:59 PM (Room TBA)

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

$$\text{Max}\{(30\% \text{ of Midterm I} + 30\% \text{ of Midterm II} + 45\% \text{ Final}), (100\% \text{ Final})\}$$

### **Copyright:**

All material in this course is, unless otherwise stated, the property of Ivana Komunjer (UCSD). Copyright and other intellectual property laws protect these materials. Reproduction or retransmission of the materials, in whole or in part, in any manner, without the prior written consent of the copyright holder, is a violation of copyright law. A single copy of the materials available through this course may be made, solely for personal, noncommercial use. Individuals must preserve any copyright or other notices contained in or associated with them. Users may not distribute such copies to others, whether or not in electronic form, whether or not for a charge or other consideration, without prior written consent of the copyright holder of the materials. Contact information for requests for permission to reproduce or distribute materials available through this course is: Ivana Komunjer [komunjer@ucsd.edu]

## Weekly Schedule

SESSION	DATE	COURSE TITLE	PROBLEM SET
Session 1:	Thur, Oct 02	Course Introduction	n/a
Session 2:	Tue, Oct 07	Ch 1: Introduction to the Financial Environment	
			Math Review
Session 3:	Thur, Oct 09	Ch 2: Financial Instruments	
Session 4:	Tue, Oct 14	Ch 3: Fixed Income I	
			Problem Set 1
Session 5:	Thur, Oct 16	Ch 4: Fixed Income – An Application	
Session 6:	Tue, Oct 21	Ch 5: Fixed Income II	
			Problem Set 2
Session 7:	Thur, Oct 23	Fixed Income Review	
Session 8:	Tue, Oct 28	<b>Midterm Exam I</b>	
			Midterm Solution
Session 9:	Thur, Oct 30	Ch 6: Options I	
Session 10:	Tue, Nov 04	Ch 7: Options II	
			Problem Set 3
Session 11:	Thur, Nov 06	Ch 8: Options III	

Session 12:	Tue, Nov 11	<i>No Class: Veterans Day Holiday</i>	
			Problem Set 4
Session 13:	Thur, Nov 13	Ch 9: Options IV	
Session 14:	Tue, Nov 18	Options Review	
			Problem Set 5
Session 15:	Thur, Nov 20	<b>Midterm Exam II</b>	
Session 16:	Tue, Nov 25	Ch 10: Portfolio Choice Theory I	
			Midterm Solution
Session 17:	Thur, Nov 27	<i>No Class: Thanksgiving Holiday</i>	
Session 18:	Tue, Dec 02	Ch 11: Portfolio Choice Theory II	
			Problem Set 6
Session 19:	Thur, Dec 04	Ch 12: Portfolio Choice – Application	
Session 20:	Tue, Dec 09	Ch 13: Portfolio Choice – Application	
			Final Exam Review
Session 21:	Thur, Dec 11	Ch 14: CAPM	
	Thur/Fri, Dec 18/19	<b>Final Exam</b>	