

Economics 360-2
Masako Ueda

Northwestern University
Department of Economics

Investments
Winter 2020

Contact Info: m-ueda@northwestern.edu; Phone (847)770-1592

Office Hours: Tuesdays 1:30-2:30pm or by appointment @KGH 3195

Lectures: MW 12:30pm-1:50pm @Technological Institute Lecture Room 4

Prerequisites: Econ 360-1, Corporate Finance or equivalent

Discussion Section: F 12:30-1:20pm at Technological Institute Lecture Room 4

TA: Jingxiong Hu (jingxionghu2022@u.northwestern.edu)

TA Office Hours: 1:20-1:50pm following the discussion section, or by appointment

Goal

The goal of this course is to introduce students to the theories and techniques involved in forming a portfolio of securities. In particular, by the end of the quarter, students should be familiar with the existing set of financial instruments and the related terminology, have an understanding of the tradeoffs facing investors, and have the ability to evaluate alternative investment strategies. Much of the course will rely heavily on statistics and economics and their applications in real-world finance are emphasized. Topics related to security selection will be discussed, but the primary focus of the course is on the creation of optimal portfolios of securities. Topics include asset allocation, asset pricing models, market efficiency, anomalies, performance evaluation and fixed-income securities.

Readings

- Required Texts: Investments 11th edition, by Bodie, Kane and Marcus, McGraw-Hill. Earlier editions are also acceptable.
- HBSP Cases: (1) Asset Allocation at the Cook County Pension Fund, (2) Thompson Asset Management, (3) Arbitrage in Government Bond Market and (4) Strategic Capital Partners. The link to purchase these cases is in canvas (->Syllabus).
- Other materials: Several short readings, handout, problem sets and their suggested solutions and sample exams to be posted at canvas.northwestern.edu.

Excel and Python

In addition to Excel, this course uses the programming language Python. Please install Anaconda, which is a Python software package, along with pandas_datareader onto your laptop before the first discussion section on Friday Jan 10.

- For installation of Anaconda, see https://python.quantecon.org/getting_started.html
- For installation of pandas_datareader, execute “conda install -c anaconda pandas-datareader” in Terminal in mac and Command Prompt in Windows.

Grading

There are two exams (midterm and final) which count towards 65% of your course grade. The exam grade will be determined from the *higher* of the following two weighted averages:

- (1) 25% midterm exam, and 40% final exam;
- (2) 10% midterm exam, and 55% final exam.

There are 6 graded problem sets. I will drop the lowest problem set score from your grade. The remaining five problem sets will each account for 6% of your grade, for a total of 30% of your final grade. The background survey accounts for 1% of your grade. The last 4% of the grade is based on class etiquettes and contribution.

The midterm exam is scheduled in class. *The final exam* is cumulative. End-of-chapter problems and sample exams (to be posted on canvas) will provide valuable practice for the midterm and final. Some problem sets contain such practices but not many.

The problem sets will mostly require you to obtain and make use of real-world financial data or to analyze a case and thus will give you an idea of how theory connects to reality. Students may form study groups; each group consists of at most three people, and submits one write-up for the problem sets. The problem sets are due at the beginning of class on their due dates. Late problem sets will not be accepted. Some problem sets are challenging and graded mainly on the basis of completion.

Class contribution is required to enrich the learning environment and make the class more interesting and beneficial for everyone involved. In addition, it is good preparation for future endeavors in the business world.

Class contribution can be demonstrated in three ways. First, you can contribute to class by speaking in class. Second, you can post constructive questions/suggestions/articles about the class material, problem sets and cases, on the online forum. Third, you can e-mail me written feedback about the course. Disturbing behaviors count as negative contribution.

If you would like your exam regraded, type up why you feel the current grade is incorrect. Staple your statement at the top of your exam and hand it to me within one week of the day on which the exam was returned. Then, we will regrade the whole exam. Be aware that your grade may go down after regrading. If there is an error in totaling up your score, you may write this on the cover of your exam. Say what you think the total should be.

Open-book Exams

The two exams are both open-book, but hard. If you are trying to obtain a good grade, review the class materials including sample exams thoroughly before each exam.

Mobile Communications Policy

Mobile telephone devices should have the ringer turned off. Students may not make or receive phone calls, or send or receive text messages during class.

The Class Honor Code

Students are encouraged to work together when preparing for class, problem sets and exams. However, actual exams should be wholly your own individual effort. Any remaining questions or uncertainty should be discussed with me. Violating the class honor code will result in a harsh penalty. Students are also expected to treat classmates and the instructor with respect. This includes arriving for class on time and refraining from any disruptive behavior during class.

Course Schedule (subject to minor change)

<u>DAYS</u>	<u>TOPICS</u>	<u>IMPORTANT DATES</u>
Jan 6	<i>Introduction and Review (Ch. 5)</i>	Python Tutorial on and Survey due Jan 10 (F)
Jan 8, 13 & 15 (3 classes)	<i>Asset Allocation (Ch. 6-8)</i> Risk and Return, Capital Allocation, Portfolio Selection, Minimum Variance Frontier, Index Models	PS #1 due Jan 15 (W)
Jan 22, 27 & 29 (3 classes)	<i>Asset Pricing Models (Ch. 9-10)</i> CAPM, APT, Factor Models	PS #2 due Jan 22 (W)
Feb 3 & 5 (2 classes)	<i>Market Efficiency and Anomalies (Ch. 11-13, 24)</i> Return Predictability, Behavioral Finance, Performance Measures	PS #3 due Feb 5 (W)
Feb 10 (M)	IN-CLASS MIDTERM EXAM	
Feb 12, 17 & 19 (3 classes)	<i>Market Efficiency and Anomalies, cont'd</i>	PS #4 due W Feb 19
Feb 24 & 26 and Mar 2 (3 classes)	<i>Fixed Income Securities</i> Case: Arbitrage in Government Bond Market	PS #5 due M Mar 2
Mar 4 and 9	<i>Limits to Arbitrage</i>	PS #6 due M Mar 9
Mar 11 (W)	<i>Review Session</i>	
Mar 18 (W)	Cumulative FINAL EXAM, 3-5pm	