

Fin 521 Investment I Module 3, 2021

Course Information

Instructor: Lingxiao Zhao

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Office Hour: Monday & Thursday 15:30-16:30

Teaching Assistant: TBD

Classes:

Lectures:

Section 1: Monday & Thursday 8:30-10:20

Section 2: Monday & Thursday 13:30-15:20

Venue: PHBS Building, Room

Course Website:

Investment I

Please make sure to enrol to the website online ASAP in order to access to course materials.

Lecture notes will be posted the night before the class. You are supposed to download and bring your own copy.

1. Course Description

1.1 Context

Course overview: This course offers the financial theory and quantitative tools necessary for understanding how stock prices are determined, and how financial assets are used for investment decisions. Topics covered include modelling the relation between risk and return, optimal portfolio selection based on mean-variance analysis, asset pricing models, money management and more. The focus is mainly on common stocks, but fixed income securities (bonds) will be analysed briefly. After the class, students are expected to obtain an in-depth understanding of some of the major empirical issues in investment. Also, students are required to learn facts, theories, and the associated statistical tools to analyse financial data with R/Matlab/Python.

Prerequisites: Financial Market (F540) or equivalent

1.2 Textbooks and Reading Materials

Bodie, Zvi, Alex Kane, and Alan Marcus, Investments, McGraw Hill, 10th Edition,

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment (YES with details or NO)
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Yes
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Yes
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	Yes
	2.2. Students will be able to apply leadership theories and related skills.	NA
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	Yes
	3.2. Our students will practice ethics in the duration of the program.	Yes
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Yes
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Yes
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Yes
	5.3. Our students will demonstrate competency in critical thinking.	Yes

2.2 Course specific objectives

2.3 Assessment/Grading Details

20 points: Group project

~ Presentation 10 points

~ Reports 10 points

20 points: Midterm exam

40 points: Final exam

10 points: Homework

10 points: Attendance

Final grades are curved, the letter grades are given roughly by the following rule:

A: the top 30% of the class

B: above the lower 10% of the class

F: fail to participate in the group project or total final numerical score is less than 70

There will be no opportunities for extra credit.

Class participating count is done by random calls in class, each time of missing the call costs 5 participating points. Personal reasons, other school business, or family emergency will not be considered as excuses for missing class. For illness, you need to provide doctor's prescription.

I will only consider upgrading marginal cases where a student's letter score is F. In this case, the student must have full class participation score, and none zero project score, and his/her final score should be at least 65. The upgrade is automatically applied, so no need to talk to me, no other upgrade will be considered in this class. There is little can be done after an unsatisfactory grade has been given.

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

3. Topics, Teaching and Assessment Schedule

Week1: Introduction, Properties of Stock Returns

Week2: Interest Rates and Bonds

Week3: Asset Allocation

Week4: Portfolio Choice

Week5: CAPM, APT

Week6: Latent Factor Models, Anomalies

Week7: Predictive Regression, Performance Evaluation

Week8: Advanced Topics: Moments, ML and Shrinkage Estimation; Bayesian

Week9: Class presentation

Note: both the class design and the time of the presentation of class project is attentive; I might change the schedule time

4. Miscellaneous

Project:

The main goals of my class is to promote self-learning, problem solving and team work. These are vital skills for your future success. To achieve these goals, I will assign team of 4-6 students to prepare a class project on a pre-specified topic.

Nature of the project

The project is to mimic assignments you will face in a real life setting, it has strong industry and practice flavour. However, since this is a classroom environment, it also has a flavour of learning and exploring. The project is more structured than what you will face in industry practice. However, you should not treat the project as a homework assignment where you answer every question step by step without having a say on what you think you should do. The project gives you the freedom to add new things outside of the structure given. However, if you want to put major modification to the structure (for example, due to data limitation) you need to get my permission first.

Chinese students will be mixed with non-Chinese students in a team. Chinese content must be discussed and explained in English by the group members. Note if you are not comfortable of learning from your group mates or testing Chinese stock market data, you might consider taking other sections of the Investment course as my course is specifically designed to make you familiar with Chinese stock market.

You are expected to do independent research on the topic from various sources such as library publications, internet, and collect data by yourself. If you want to do well in the future these ability is essential. Your final project includes a final report (in word document), and a power point presentation which should be turned in electronically on or before the last day of week 9.

Team management

Teams will be assigned on a random basis to mix students with different gender, school and undergraduate major. Working with team is essential. Once the team is assigned, there should be no change in the team member. Each team should figure out a way to manage to the best effect.

I will not interfere with work load assignment or how you interact with other. However, free-riding is not allowed. This means that you have to reach an agreement beforehand regarding how to work on the project. For any member who does not do his/her part, you should make sure to report to me, this member will not get the score for the group project which means he/she will fail this class.