

MSPE 521: Financial Economic Analysis

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Main Course Materials: Course Slides and Lecture Notes, prepared by the instructor

Recommended Textbooks

- *Introduction to Computational Finance and Financial Econometrics* by Eric Zivot, <https://bookdown.org/compfinezbook/introcompfinr/>
- *Financial Econometrics* by Oliver Linton, Cambridge University Press
- *Econometric Modelling with Time Series* by Vance Martin, Stan Hurn and David Harris, Cambridge University Press.
- *Financial Econometric Modeling* by Hurn, Martin, Phillips and Yu, Oxford University Press

Exams: There will be two in-class closed-book exams (**Week 6** and **Week 12**), and one open-book take-home final exam (**due date determined by University**). Please see the course schedule below.

Grading: As discussed above, there will be two in-class exams and one take-home exam. They will count toward the grade as follows, along with your class participation. If you miss any of the exams, you cannot pass this course.

Exam 1, 2 and Final Exam	100% (35/35/30% each)
Class Participation	Bonus Credits

Practice Questions

There will be occasional practice questions, which will be discussed in class. These questions will be important for your exams.

Please use our course webpage for your questions. In this way we can openly discuss what are difficult and how to overcome. Practice questions are mainly to encourage you to "practice", and understanding them by yourself will be the most important task in this class. *The written*

solutions will not be provided; you are supposed to review the course materials and find the answers by yourselves. Memorizing solutions right before the exam is not the right way to

learn. If you want to clarify your understanding, please talk to the instructor or grader by setting up an appointment.

Academic Integrity

Regarding the violation of academic integrity, the student code for ACADEMIC INTEGRITY POLICY AND PROCEDURE from the University of Illinois system will be strictly followed: <http://studentcode.illinois.edu/article1/part4/1-402/>

Description of the Course

This course serves as an introduction to financial economics and empirical finance, with the main focus being the study of core concepts in finance, comprehension of various finance models, and their application to real financial data. We begin by reviewing essential background concepts, followed by an exploration of popular finance models. Throughout the course, students will engage in both analytical problem sets and data exercises as practice questions.

Course Schedule and Topics - subject to some changes

- Course Introduction
- Understanding Financial Market, Price and Returns
- Portfolio Theory
- Portfolio Theory with Short Sales Restriction
- Portfolio Risk Budgeting
- Single Index Model
- Single Index & Factor Models
- Empirical Asset Pricing with Factor Models
- Efficient Market Hypothesis
- Present Value Models
- Review or Advanced Topics, to be determined