

COURSE SPECIFICATION

The course information as follows may be subject to change, either during the session because of unforeseen circumstances, or following review of the course at the end of the session. Queries about the course should be directed to the course instructor.

1.	Course Title	Financial Economics				
2.	Originating Department	Department of Finance				
3.	Course Code	FIN308				
4.	Credit Value	3				
5.	Course Type	Major Elective Courses				
6.	Semester	Spring				
7.	Teaching Language	English & Chinese				
8.	Instructor(s), Affiliation & Contact For team teaching, please list all instructors	Jerry YANG Lecturer, Department of Finance /Email: yangxn@sustc.edu.cn /office: 3 325, Wisdom Valley 3#325				
9.	Tutor/TA(s), Contact	To be announced				
10.	Maximum Optional Enrolment					
11.	Delivery Method	/ /	/	()		
		Lectures	Tutorials	Lab/Practical	Other Please specify	Total
	Credit Hours	48	4			48

12. Pre-requisites or Other Academic Requirements	FIN206 Corporate Finance
13. Courses for which this course is a pre-requisite	None
14. Cross-listing Dept.	None

SYLLABUS

15. Course Objectives

The course aims to build up and enhance student financial intuition and understand modern financial theory for learning more advanced financial course. Another objective is to introduce students to the precise modelling of many of the concepts discussed in their capital markets and corporate finance classes. The third objective is to review rigorously and concisely the main themes of financial economics (those that students should have encountered in prior courses) and, finally, to introduce several frontier ideas of importance for the evolution of the discipline and of relevance from a practitioner's perspective.

16. Learning Outcomes

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This course focuses on financial economics, especially on asset pricing and the valuation of risky cash flows. After learning the details of consumer decision-making under uncertainty, it uses that general framework as a basis for understanding both equilibrium and no-arbitrage theories of securities pricing, including the capital asset pricing model (CAPM), the consumption capital asset pricing model (CCAPM), Arrow-Debreu theories, martingale pricing methods, and the arbitrage pricing theory (APT).

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Course Contents (in Parts/Chapters/Sections/Weeks. Please notify name of instructor for course section(s), if this is a team teaching or module course.)

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Lecture 1 Introduction and Decision-Making Under Uncertainty

This lecture starts with the milestones in Modern Finance-three times revolution. At first, it gives a simple introduction of financial system, and it focuses on the problems such as saving and growth rate, the impact of Financial system, empirical finance, pricing safe and risky cash flows and so on. It also studies the two Perspectives on Asset Pricing.

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Lecture 2 Making Choices in Risky Situations

This lecture focuses on the Criteria for Choice Over Risky Prospects. At first, it introduces the Preferences and Utility Functions, then it studies the Expected Utility Functions, the Expected Utility Theorem and the Generalizations of Expected Utility. It also introduces the Allais Paradox. It proves the theory of expected utility, and the rational choice axioms based on the theory of expected utility, which itself has the problem of logical inconsistency.

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Lecture 3 Measuring Risk and Risk Aversion

This lecture mainly focuses on Measuring Risk Aversion. At first, it gives the interpretation of the Measures of Risk Aversion, then it introduces the concepts of Risk Premium and Certainty Equivalence, help students understand the main methods for assessing the Level of Risk Aversion. After that, it introduces the concept of Stochastic Dominance and studies the Mean Preserving Spreads.

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Lecture 4 Risk Aversion and Investment Decisions

This lecture mainly focuses on the Risk Aversion and Portfolio Allocation. The main problems include Portfolios, Risk Aversion, and Wealth. It studies the Risk Aversion and Saving Behavior of people, which will help students understand the concepts and roles of the Separating Risk and Time Preferences.

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Lecture 5 Modern Portfolio Theory

This lecture mainly studies generalizing the Portfolio Problem. At first, through justifying Mean-Variance Utility, applying the Gains from Diversification, getting the Efficient Frontier, to help students understand the capital asset pricing problem. Then it introduces the Separation Theorem and talks about the strengths and shortcomings of MPT.

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Lecture 6 The Capital Asset Pricing Model

This lecture mainly focuses on the MPT and the CAPM. At first, it introduces the process of deriving the CAPM and studies the problem of valuing Risky Cash Flows. Then it further analyses the strengths and shortcomings of the CAPM.

Lecture 7 Arbitrage Pricing Theory

This lecture focuses on various pricing theories and provides a detailed overview and comparison. By studying the market model, the arbitrage pricing theory is introduced, and the multi-factor model and arbitrage pricing theory are further studied to help students understand the essence of various pricing theories.

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Lecture 8 Arrow-Debreu Pricing: Equilibrium

This lecture focuses on the Arrow-Debreu theory and capital asset pricing model. Firstly, it introduces the concept and related background of the Arrow-Debreu economy, introduces the concept of competitive equilibrium and Pareto optimality, and studies the issues related to optimal risk sharing, equilibrium and no-arbitrage, and Euler equation.

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Lecture 9 Arrow-Debreu Pricing: No-Arbitrage

This lecture mainly focuses on analytic strategy, market completeness and complex securities. The key problems include using the Term Structure of Interest Rates to Infer, Contingent Claims Prices, the Value Additivity Theorem, Using Options to Complete the Market, Using Options to Infer Contingent Claims Prices and Black-Scholes-Merton Option Pricing B-S-M.

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Lecture 10 Martingale Pricing

This lecture mainly focuses on the approaches to valuation. It starts from the setting and the intuition and makes sure the definitions and basic results. Then it further studies the relation to Arrow-Debreu, help students understand the market Incompleteness and arbitrage bounds

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Textbook and Supplementary Readings

Text Book

Intermediate Financial Theory-2nd Edition, Jean-Pierre Danthine, John B. Donaldson; :

Reference book

Capital Ideas, Peter Bernstein

Investments-9th Edition, Zvi Bodie, Alex Kane, Alan J.Marcus.

Financial Economics (Second Edition), Zvi Bodie, Robert C.Merton, David L.Cleeton.

ASSESSMENT

19.

Type of Assessment	Time	% of final score	Penalty	Notes
Attendance	5	10		Combining with class performance
Class Performance				
Quiz				
Projects	2	15		
Assignments	4	10		Handwriting
Mid-Term Test		30		
Final Exam		35		
Final Presentation				
Others (The above may be modified as necessary)				

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GRADING SYSTEM

A.	Letter Grading
B.	/ Pass/Fail Grading

REVIEW AND APPROVAL

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This Course has been approved by the following person or committee of authority

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