

# 课程详述

# **COURSE SPECIFICATION**

以下课程信息可能根据实际授课需要或在课程检讨之后产生变动。如对课程有任何疑问,请联 系授课教师。

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.	课程名称 Course Title	金融经济学 Financial Economics							
2.	授课院系 Originating Department	金融系 Department of Finance							
3.	课程编号 Course Code	FIN308							
4.	课程学分 Credit Value	3							
5.	课程类别 Course Type	专业选修课 Major Elective Courses							
6.	授课学期 Semester	春季 Spring							
7.	授课语言 Teaching Language	中英双语 English & Chinese							
8.	授课教师、所属学系、联系方 式(如属团队授课,请列明其 他授课教师)	杨旭宁,教学讲师,金融系 Jerry YANG,Lecturer, Department of Finance							
	Instructor(s), Affiliation& Contact (For team teaching, please list all instructors)	邮箱/Email: yangxn@sustc.edu.cn 办公室/office:慧园 3 栋 325, Wisdom Valley 3#325							
9.	实验员/助教、所属学系、联系 方式 Tutor/TA(s), Contact	待公布 To be announced							
10.	选课人数限额(可不填)  Maximum Enrolment  (Optional)								
11.	授课方式 Delivery Method	讲授 Lectures	习题/辅导/讨论 Tutorials	实验/实习 Lab/Practical	其它(请具体注明) Other (Please specify)	总学时 Total			
	学时数 Credit Hours	48	4			48			



is a pre-requisite

14. 其它要求修读本课程的学系 Cross-listing Dept. 无 None

#### 教学大纲及教学日历 SYLLABUS

#### 15. 教学目标 Course Objectives

此课程的首要课程教学目标是建立并强化学生的金融直觉以及为之后更深入的课程奠定现代金融理论知识基础。第二个课程教学目标是向学生介绍在资本市场以及公司金融课程当中某些概念的准确模型推演。第三个课程教学目标是严谨而简要地复习金融经济学的重要主题(这些主题在学生之前的课程中都有遇到)。最后,从一个从业者的角度为学生介绍一系列与行为相关的演化的重要前沿理论。

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. 预达学习成果 Learning Outcomes

该门课程聚焦于金融经济学,特别是其中关于资产定价以及风险现金流价值的内容。在学生学习了消费者在风险条件下决策的内容,学生可以利用这个通用的框架了解证券的均衡理论和无套利理论,包括资本资产定价模型,消费资本资产定价模型,阿罗-德布鲁模型,鞅测度方法,以及套利定价理论。

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).

**17**. 课程内容及教学日历(如授课语言以英文为主,则课程内容介绍可以用英文,如团队教学或模块教学,教学日历须注明主讲人)

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.)

## 第一讲课程简介以及风险条件下的决策(6学时)

本讲从现代金融理论的三次革命出发,首先对金融体系进行简要的介绍,关注储蓄与增长率、对金融体系的影响、实证金融、无风险以及风险现金流的定价等问题,探讨资产定价的两种观点。

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.



## 第二讲不确定条件下的选择理论(6学时)

本讲主要研究风险的选择标准,引入偏好和效用函数的概念,介绍期望效用函数、期望效用理论以及期望效用的一般性认知。介绍阿来悖论,证明预期效用理论,以及预期效用理论根据的理性选择公理,本身存在逻辑不一致的问题。

#### 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.

#### 第三讲 风险与风险厌恶的度量(6学时)

本讲主要关注风险厌恶的测度。首先给出了风险厌恶测度的解释,进而引入风险溢价与确定性等价,了解风险厌恶水平的评估的主要方法。进一步了解随机占优的概念,并研究保持均值不变的扩展。

#### 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.

## 第四讲 风险厌恶与投资决策(3学时)

本讲主要关注风险厌恶与资产组合,研究的主要问题包括组合、风险厌恶与财富,研究人们的风险厌恶与储蓄行为,理解风险分离与时间偏好的概念和意义。

#### 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.

#### 第五讲 现代资产组合理论(6学时)

本讲主要研究资产组合的一般性问题。首先通过均方效用的证明,应用分散化所得,确定投资的有效边界,从而理解现代资产组合理论。介绍两基金分离定理,对比现代组合理论的优势与不足。

#### 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.

#### 第六讲 资本资产定价模型(3 学时)

本讲主要关注现代组合理论与资本资产定价模型。首先介绍了资本资产定价模型的推导过程,研究对风险现金流的定价问题,进而分析资本资产模型的优势与不足。

#### 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.



#### 第七讲 套利定价理论 (6 学时)

本讲主要研究各种定价理论,并对其进行详细的概述与比较。通过研究市场模型,介绍套利定价理论,并进一步研究多因子模型与套利定价理论,帮助学生理解多种定价理论的本质。

#### 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.

## 第八讲 阿罗-德布鲁定价——均衡理论(3 学时)

本讲主要研究阿罗-德布鲁理论与资本资产定价模型。首选介绍了阿罗-德布鲁经济的概念及相关背景,引入竞争性均衡与帕累托最优的概念,研究最优风险分享、均衡与无套利以及欧拉方程的相关问题。

#### 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.

#### 第九讲 阿罗-德布鲁定价——无套利理论 (6 学时)

本讲主要研究分析策略、市场完备性与复合证券的相关问题。主要的研究问题包括利率期限结构推断、或有权定价、价值可加性理论、用期权完备市场、用期权推断或有权定价、期权定价公式。

#### 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.

#### 第十讲 鞅测度(3学时)

本讲主要关注定价的方法论。主要从设计与直觉入手,明确基本原则的定义,进一步探究与阿罗-德布鲁之间的关系,掌握非完备性市场与套利边界的相关内容。

## 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

## 18. 教材及其它参考资料 Textbook and Supplementary Readings

#### Text Book:

Intermediate Financial Theory-2nd Edition, Jean-Pierre Danthine, John B. Donaldson;出版社:西南财经大学出版社

#### Reference book:

Capital Ideas, Peter Bernstein



Investments-9th Edition, Zvi Bodie, Alex Kane, Alan J.Marcus. 出版社:机械工业出版社

Financial Economics (Second Edition), Zvi Bodie, Robert C.Merton, David L.Cleeton. 出版社:中国人民大学出版社

《金融经济学》,王江著,出版社:中国人民大学出版社

## 课程评估 ASSESSMENT

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19.	评估形式 Type of Assessment	评估时间 Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
	出勤 Attendance	5	10		与课堂表现结合 Combining with class performance
	课堂表现 Class Performance				J I
	小测验 Quiz				
	课程项目 Projects	2	15		
	平时作业 Assignments	4	10		手写 Handwriting
	期中考试 Mid-Term Test		30		
	期末考试 Final Exam		35		Halley .
	期末报告 Final Presentation				
	其它(可根据需要 改写以上评估方 式)			30,000	
	Others (The above may be modified as necessary)				

# 20. 记分方式 GRADING SYSTEM

√ A. 十三级等级制 Letter Grading

□ B. 二级记分制(通过/不通过) Pass/Fail Grading

## 课程审批 REVIEW AND APPROVAL

21. 本课程设置已经过以下责任人/委员会审议通过
This Course has been approved by the following person or committee of authority