

## 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	数学系 Department of Mathematics				
3.	课程编号 Course Code	FMA302				
4.	课程学分 Credit Value	3				
5.	课程类别 Course Type	专业核心课 Major Core 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) Instructor(s), Affiliation & Contact (For team teaching, please list all instructors)	古嘉雯 Gu, Jiawen 数学系 Mathematics gujw@sustc.edu.cn				
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	无 NA / 待公布 To be announced / 已确定的实验员/助教联系方式 Please list all Tutor/TA(s)				
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			复习考试(2周)	48

12.	先修课程、其它学习要求 <b>Pre-requisites or Other Academic Requirements</b>	概率论与数理统计或数理统计 Probability and Statistics or Mathematical Statistics
13.	后续课程、其它学习规划 <b>Courses for which this course is a pre-requisite</b>	
14.	其它要求修读本课程的学系 <b>Cross-listing Dept.</b>	

**教学大纲及教学日历 SYLLABUS**

15. **教学目标 Course Objectives**

在简化的静态市场模型框架下，了解金融所涉及的基本经济问题，掌握对这些问题进行分析的理论框架、基本概念、一般原理以及利用相关原理解决各个问题的简单理论模型。

Under a simplified static market model, the students should learn to understand the basic economic problems arising from the financial area, grasp the theoretical framework of the analysis for these problems, basic concept, general principles and theoretical models based on the related principle to solve problems.

16. **预达学习成果 Learning Outcomes**

通过教学使学生掌握金融经济学原理以及相关的数学证明。

Students are expected to understand not only the financial theories but also their mathematical proofs.

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.)**

一: Arrow-Debreu 经济 (8 学时)

证券市场, 基本经济模型, 市场均衡, Pareto 最优。

Part I. Arrow-Debreu economics

Securities market, basic economic model, market equilibrium, Pareto optimality.

二: 套利和资产定价 (8 学时)

套利, 无套利原理, 资产定价基本定理, 风险中性定价公式, 期权定价。

Part II. Arbitrage and asset pricing

Arbitrage, no arbitrage principle, asset pricing theory, risk neutral pricing formula, option pricing.

三: 风险厌恶与期望效用函数 (8 学时)

风险厌恶, 期望效用函数, 风险厌恶的度量与比较。

Part III. Risk aversion and expected utility function

Risk aversion, expected utility function, measurement and comparison of risk aversion.

四、组合选择理论及市场中的资源配置 (8 学时)

组合选择问题及其解的存在性, 最优投资组合的性质, 随机占优, 完全市场中的均衡, 风险分担, 基于消费的资本资产定价模型, 风险溢价, 不完全市场中的均衡配置。

Part IV. Portfolio selection and capital allocation

Portfolio selection problem and the existence of its solution, the property of optimal investment portfolio, stochastic dominance, equilibrium in a complete market, allocation of risks, the consumption capital asset pricing model, risk premium, equilibrium allocation in incomplete markets.

五、均值-方差偏好的投资组合选择和资本资产定价模型 (8 学时)

均值-方差偏好, 均值方差前沿 (MVF), 最小方差组合 (MVP), 均值-方差偏好在资产定价的应用, 资本资产定价模型。

Part V. Investment portfolio selection under mean-variance preference and capital assets pricing model

Mean-variance preference, mean variance frontier, minimum variance portfolio, the application of mean-variance preference in asset pricing, capital assets pricing model.

六、套利定价理论 (APT) (8 学时)

风险因子模型, 套利定价理论 (APT), 极限套利。

Part VI. Arbitrage pricing theory

Risk factor model, arbitrage pricing theory, limits to arbitrage.

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

参考教材 Textbook:

金融经济学,王江著,中国人民大学出版社, 2006.

Principles of Financial Economics (Second edition). S. LeRoy and J. Werner, Cambridge University Press, 2014.

Intermediate Financial Theory (Third Edition), Jean-Pierre Danthine and John B. Donaldson, Academic Press, 2014.

### 课程评估 ASSESSMENT

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		0		
课堂表现 Class Performance		0		
小测验 Quiz		0		
课程项目 Projects		0		
平时作业 Assignments		15%		
期中考试 Mid-Term Test		35%		
期末考试 Final Exam		50%		
期末报告 Final Presentation				
其它(可根据需要 改写以上评估方 式) 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