Alliance Manchester Business School

PGR Course unit outline 2022/23

Unit code:	**BMAN80931**
Title:	**Advanced Finance Theory**
Credit value:	**15**
Semester:	**1**
Course Coordinator contact details:	Prof. Hening Liu Office: 4.080 AMBS, Telephone extension: 54492 Email address: hening.liu@manchester.ac.uk Office hours: by appointment
Other staff involved contact details:	None
Pre-requisites **Co-requisites** **Dependent course units** **Restrictions**	Limited to students in the PhD finance programme

Course unit overview

This is a PhD course in asset pricing theory. The course covers various aspects of equilibrium asset prices in dynamic economies. Topics to be covered include: 1) utility preferences, 2) mean-variance theory and the CAPM, 3) empirical tests of asset pricing models, 4) stochastic discount factor, 5) the Arrow-Debreu economy and state prices, 6) consumption-based asset pricing, and 7) production-based asset pricing.

Aims

Introduce students to the mainstream asset pricing theories that are fundamental to research development in finance and to provide an understanding of how asset pricing models are formally constructed and tested.

Objectives (Learning outcomes)

On completion of this unit successful students will be able to have 1) an understanding of key elements in the mainstream asset pricing theories, 2) systematic knowledge in both implications of asset pricing models and empirical implementations.

Syllabus content

Prerequisites

Students are required to have working understanding in calculus, probability theory, stochastic processes and matrix algebra. Basic knowledge in stocks, bonds, and derivatives is required. Programming skills are a plus.

Topics

1. Utility preferences
2. Mean-variance theory and the CAPM
3. Empirical tests of the CAPM and multi-factor models
4. Stochastic discount factor

5. General equilibrium and the Arrow-Debreu economy
6. Dynamic programming
7. Consumption-based asset pricing
8. Production-based asset pricing

Methods of delivery

Lectures	3 hours per week, 10 weeks
Seminar/Tutorial/Workshop/Lab Hours	N/A
Independent Study	120 hours
Total Study Hours	150 hours

Reading List

Pre Reading: Chapter 1-2 and Appendices, Munk, Claus, "Financial Asset Pricing Theory", Oxford University Press 2013.
Core Text: Munk, Claus, "Financial Asset Pricing Theory", Oxford University Press 2013.
Supplementary Text: Back, Kerry, "Asset Pricing and Portfolio Choice Theory", 2nd edition, Oxford University Press 2017.

Assessment

Mode of Assessment	Length required	Weighting within unit
Problem sets (including both qualitative and quantitative questions; computer programming will be required)	Submission deadline: 31st, January, 2023	100%
Resits: Problem sets (including both qualitative and quantitative questions; computer programming will be required)		

Feedback methods

Detailed feedback (both formative and summative) on the coursework will be provided via Blackboard.

Social Responsibility

AMBS aims for our graduates to develop not only academic and professional skills, but also a sense of social, ethical and environmental responsibility towards the societies of which they are part. Please give details of how social responsibility is addressed in your course unit by highlighting any knowledge or skills that support students' social and ethical understanding and conduct.

This course consists of an aim to educate students responsible and sustainable investing issues, opportunities, and challenges and to engage them to discuss and design investment processes, products, and practices that deliver investment returns and fund flow.

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Please indicate by ticking the box(es) below, which specific aspect of SR your module is linked to:

[ ]	A UN SDGs*	[X]	Environmental Sustainability
[ ]	Other (please specify)		

** If a UN SDG, please note which one by reviewing the list here*

For additional support on how embed SR into your module, please review the resources here:
https://documents.manchester.ac.uk/DocuInfo.aspx?DocID=51837
https://documents.manchester.ac.uk/DocuInfo.aspx?DocID=47017