## **School of Economics & Finance**

### **Head of School** Professor R McCrorie

## **Taught Programmes**

M.Litt.:

**Environmental History (see School of History)** 

M.Phil.:

**Environmental History (see School of History)** 

M.Sc.:
Economics
Finance (FIN)
Money, Banking and Finance (MBF)

For all Masters degrees there are exit awards available that allow suitably-qualified candidates to receive a Postgraduate Certificate or Postgraduate Diploma.

# **Programme Requirements**

#### **Economics**

Taught Element:

80 credits: EC5201 - EC5204

40 credits: EC5220 - EC5225, EC5605

M.Sc.: 120 credits as for the Taught Element plus EC5299

### Finance (FIN)

Taught Element:

100 credits: EC5601, EC5604, EC5609, EC5611, EC5901

20 credits: EC5606, EC5608, EC5610, EC5722

M.Sc.: 120 credits as for the Taught Element plus EC5699

#### Money, Banking and Finance (MBF)

Taught Element:

100 credits: EC5801, EC5605, EC5608, EC5609, EC5901 20 credits: EC5225, EC5606, EC5610, EC5611, EC5722 **M.Sc.:** 120 credits as for the Taught Element plus EC5899

## **Economics (EC) Modules**

# EC5201 Macroeconomics SCOTCAT Credits: 20 SCQF Level 11 Semester: 1 Planned timetable: To be arranged.

The module will provide a thorough advanced treatment of the core models and concepts used in modern macroeconomics; for example the infinite horison Ramsey model and finite horison overlapping generations model and models that have been used to characterise short term fluctuations, such as the real business cycle approach and the New Keynesian approach. Among other things, the module will seek to explain the development of microbased macroeconomic theory, use models to predict the impact of policy changes on endogenous variables and critique modelling assumptions, especially in the context of policy analysis. Students are expected to have a strong undergraduate level training in macroeconomics, microeconomics and relevant mathematical and statistical techniques.

Programme module type:	Compulsory for M.Sc. in Economics Optional for M.Sc. in Money, Banking and Finance.
Anti-requisite(s):	EC5801
Learning and teaching methods and delivery:	2 lectures, 1 tutorial.
Assessment pattern:	Coursework = 25%, 3-hour Examination = 75%
Module Co-ordinator:	Prof R McCrorie
Lecturer(s)/Tutor(s):	Prof K Mitra, Prof A Sutherland, Dr O Senay, Dr A Trew

# EC5202 Microeconomics SCOTCAT Credits: 20 SCQF Level 11 Semester: 1 Planned timetable: To be arranged.

This module will provide a thorough advanced treatment of the core models and concepts used in modern microeconomics. Microeconomic theory is concerned with the behaviour of individual economic actors (e.g. firms, consumers) and the aggregation of their actions in different institutional frameworks (e.g. markets), and models economic activity as an interaction of individual economic agents pursuing their private interests. Students will be presented with a set of concepts and mathematical techniques which will enable them to achieve a better understanding of economic activity and outcomes. This involves an understanding of how microeconomic models are built, focusing on their objective in terms of the phenomenon they are meant to explain, and the consequences of their assumptions in terms of the applicability of their predictions. Students are expected to have a strong undergraduate level training in macroeconomics, microeconomics and relevant mathematical and statistical techniques.

Programme module type:	Compulsory for M.Sc. in Economics
Learning and teaching methods and delivery:	2 lectures, 1 tutorial.
Assessment pattern:	Coursework = 25%, 3-hour Examination = 75%
Module Co-ordinator:	Prof R McCrorie
Lecturer(s)/Tutor(s):	Prof P Manzini, Prof M Mariotti, Dr A Nichifor, Dr Y Gerasimou

#### **EC5203 Econometric Methods and Applications**

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SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Planned timetable:	To be arranged.			

This module will provide an advanced level training in aspects of econometric methods that is suitable for the basis for further work in econometrics and for understanding/being able to extract econometric techniques in published articles. The course will also give students the basis to support an empirical section in their MSc dissertation. Students are expected to have intermediate- level knowledge of matrix algebra, calculus and statistics.

Programme module type:	Compulsory for M.Sc. in Economics Optional for M.Sc. in Money, Banking and Finance.		
Anti-requisite(s):	EC5609 Required for: EC5221		
Learning and teaching methods and delivery:	2 lectures, occasional practical classes and tutorials.		
Assessment pattern:	Coursework = 25%, 3-hour Examination = 75%		
Module Co-ordinator:	Prof R McCrorie		
Lecturer(s)/Tutor(s):	Prof R McCrorie		

#### **EC5204 Mathematical Economics**

SCOTCAT Credits:	20	SCQF Level 11	Semester:	1
Planned timetable:	To be arranged.			

This module will provide a thorough advanced treatment of the mathematical techniques and concepts used in modern economic theory. All economists in whatever career have to be able to read and understand up-to-date research as it is published in academic journals. So the first and foremost aim of this module is to provide students with the technical skills necessary to understand, and ultimately to extend, modern economic research. Topics to be covered include: sets, relations and functions; methods of proof; metric, linear, normed linear spaces; correspondences and fixed points; topology and separation; static and dynamic optimisation; and control theory and dynamic programming. Students are expected to have intermediate- level knowledge of matrix and linear algebra and calculus.

Programme module type:	Compulsory for M.Sc. in Economics
Learning and teaching methods and delivery:	2 lectures, occasional practical classes and tutorials.
Assessment pattern:	Coursework = 25%, 3-hour Examination = 75%
Module Co-ordinator:	Prof R McCrorie
Lecturer(s)/Tutor(s):	Prof P Manzini, Prof M Mariotti, Dr A Nichifor, Dr Y Gerasimou

# EC5220 Game Theory SCOTCAT Credits: 20 SCQF Level 11 Semester: 2 Planned timetable: To be arranged.

This module will provide a thorough advanced treatment of the core models and concepts used in modern game theory. Many serious things in life are games. Game theory is a set of formal techniques used to study situations of strategic interaction. These are situations where the reward obtained by each member of a group (e.g. firms, political parties, students) depends not only on the decision made by that member, but also on the decisions made by everybody else; and, in addition, everybody is aware of this interdependence. The methods of game theory are widely used in contemporary economics. An acquaintance with them is essential to the accomplished economist. In fact, game theory provides a unified language to address a spectrum of problems which is not limited to economics. Topics covered will include: strategic games; mixed strategy equilibria; extensive form games (with perfect information); bargaining games; repeated games; games of incomplete information; implementation theory; coalitional games; and bounded rationality. Students are expected to have a strong undergraduate level training in microeconomics and relevant mathematical and statistical techniques.

Programme module type:	Optional for M.Sc. in Economics, M.Sc in Money, Banking and Finance.
Learning and teaching methods and delivery:	2 lectures, occasional tutorials.
Assessment pattern:	Coursework = 25%, 3-hour Examination = 75%
Module Co-ordinator:	Prof R McCrorie
Lecturer(s)/Tutor(s):	Prof P Manzini, Prof M Mariotti, Dr A Nichifor, Dr Y Gerasimou

EC5222	EC5222 Expectations and Learning in Macroeconomics					
	SCOTCAT Credits:	20	SCQF Level 11	Semester:	2	
	Planned timetable:	To be arranged.				

This module will provide a thorough advanced treatment of the core models and concepts used to analyse learning and expectations formation in modern macroeconomics. It will develop techniques for solving for the rational expectations equilibrium (REE) and examine whether agents following adaptive or statistical learning schemes will converge over time to RE. When there are multiple REE, we will be interested in determining which of them can be possible points of convergence under learning. We will also consider cases in which learning can lead to non- REE learning dynamics. A substantial part of the module will be devoted to studying the implications of learning for macroeconomic policy. The first half of the module will focus on learning theory, in some standard set- ups, and the second half of the course will emphasise applications of learning and will mainly be based on recent journal articles or working papers. Students are expected to have a strong undergraduate level training in macroeconomics, microeconomics and relevant mathematical and statistical techniques.

Programme module type:	Optional for M.Sc. in Economics, M.Sc in Money, Banking and Finance.
Pre-requisite(s):	Admission to M.Sc. Economics or a strong undergraduate training in macroeconomics, microeconomics and relevant mathematical and statistical techniques.
Learning and teaching methods and delivery:	2 lectures, occasional tutorials.
Assessment pattern:	Coursework = 25%, 3-hour Examination = 75%
Module Co-ordinator:	Prof R McCrorie
Lecturer(s)/Tutor(s):	Prof K Mitra

### **EC5225 Experimental Economics**

SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Planned timetable:	To be arranged.			

This module will start by exposing students to the methodology of experimental economics. It will then review stylised facts and recent developments of its use to address varied research questions in economics. The rise of the use of experimental methods in economics has created a useful dialogue between theoretical and laboratory-based empirical work. Typically, this process occurs as follows: experimental economists use human participants to test the behavioural implications of theoretical models in the laboratory; the new lab empirical evidence then suggests new venues for the development of novel theoretical models. This cycle then repeats itself. This module will look at the interplay between the development of theoretical models and empirical evidence collected in the laboratory.

Topics covered will include: experimental double and posted offer auctions in spot and forward markets; experimental asset markets; experiments on structured bargaining: finite alternating-offer bargaining games; experiments on strategic-form games; Behavioural Models. Students are expected to have a strong undergraduate level training in microeconomics and statistics.

Programme module type:	Optional for M.Sc. in Economics, M.Sc in Money, Banking and Finance.
Pre-requisite(s):	Admission to M.Sc. Economics or a strong undergraduate training in macroeconomics, microeconomics and relevant mathematical and statistical techniques.
Learning and teaching methods and delivery:	2 lectures, occasional tutorials.
Assessment pattern:	3-hour Written Examination = 75%, Coursework (1,500-word Technical Essay) = 25%
Module Co-ordinator:	Prof M Costa-Gomes
Lecturer(s)/Tutor(s):	Prof M Costa-Gomes

#### **EC5299 Dissertation in Economics**

SCOTCAT Credits:	60	SCQF Level 11	Semester:	2
Planned timetable:	To be arranged.			

A dissertation in the form of a substantial extended theoretical/analytical/empirical essay/project on a topic relevant and appropriate to the M.Sc.. A selection of potential topics will be identified by members of staff and it is expected that most students will choose one of these. Pre-dissertation training in basic generic research methods and dissertation writing will be provided during the second semester. Limited supervision will be available, notably to agree topics and outlines and to check progress, but students are expected to work largely on their own initiative.

Programme module type:	Compulsory for M.Sc. in Economics
Learning and teaching methods and delivery:	Occasional lectures.
Assessment pattern:	Coursework = 10%, Dissertation = 90%
Module Co-ordinator:	Prof R McCrorie

## **EC5601 Investment Analysis**

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SCOTCAT Credits:	20	SCQF Level 11	Semester:	1		
Planned timetable:	To be arranged.					

This module introduces the basic concepts of investment value analysis. The ultimate aim is to provide the student with a standard approach to define, measure and predict value of investments in a world of uncertainty. The standard notion of risk versus return is defined and analytical economic models of how risks and returns are determined and traded in financial markets are applied to solve any investment analysis problem. The usual valuation problems covered in this module involve corporate investments, a wide array of corporate liabilities such as shares and bonds and associated financial contracts such as options.

Programme module type:	Compulsory for M.Sc. in Finance
Required for:	EC5604, EC5606, EC5722
Learning and teaching methods and delivery:	2 lectures, 1 seminar.
Assessment pattern:	Coursework = 50%, 2-hour Examination = 50%
Module Co-ordinator:	Dr G Shea

#### **EC5604 Corporate Finance**

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SCOTCAT Credits:	20	SCQF Level 11	Semester:	2	
Planned timetable:	To be arranged.				

In this module we investigate the problem of how a collection of corporate liabilities are affected in value by corporate actions. Possible actions include corporate investment decisions, decisions regarding the firm's financial structure, changes in management rules and compensation and changes in the scope, specialisation and legal environment of the corporation's business. As in the Pre-requisite(s) module, EC5601, we emphasise standard methods for solving problems under economic uncertainty. At the end of this module the student will have a good working knowledge of institutions and the theory and valuation methods used worldwide in major corporations and financial institutions.

Programme module type:	Compulsory for M.Sc. in Finance
Pre-requisite(s):	EC5601
Learning and teaching methods and delivery:	2 lectures, 1 seminar.
Assessment pattern:	Coursework = 50%, 2-hour Examination = 50%
Module Co-ordinator:	Dr G Shea

#### **EC5605 Monetary Policy**

SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Planned timetable:	To be arranged.			

This module will cover key issues in monetary policy. Topics include: the case for price stability; time inconsistency and policy, the trade-off between inflation bias and output stabilisation; inflation targeting and other monetary frameworks, and the conduct of monetary policy in leading developed and developing countries.

Programme module type:	Compulsory for Money, Banking and Finance (MBF) Optional for M.Sc. in Economics
Learning and teaching methods and delivery:	2 lectures, 1 tutorial.
Assessment pattern:	Coursework = 50%, 2-hour Examination = 50%
Module Co-ordinator:	Prof K Mitra

EC5606 Corporate Governance	606 Corporate Governance and Risk				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2	
Planned timetable:	To be arranged.	To be arranged.			
Detailed content may var control, governance, finan	Three key components: (1) corporate governance; (2) risk management; and (3) financial management. Detailed content may vary year by year, but typically would include: (1) mergers, takeovers, corporate control, governance, financial architecture, risk capital; (2) risk in corporate and international settings; (3) financial planning, methods of lending and borrowing.				
Programme module type:	Optional for M.Sc. in Finance, in Money, Banking and Finance, in International Strategy and Economics				
Pre-requisite(s):					
Learning and teaching methods and delivery:					
Assessment pattern:	Coursework = 50%	், 2-hour Examina	tion = 50%		
Module Co-ordinator:	Prof G Reid				

FCF600	C5608 Financial Intermediation				
EC5608	Financial Intermediation	n			T
	SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
	Planned timetable:	To be arranged.			
	This module will cover the main theoretical issues involved in financial intermediation, from the existence of banks through credit rationing and optimal contracts to bank runs, central banks and regulation. The module will concentrate on analytical models, but there will be some reference to current issues in existing financial systems.				
	Programme module type:	Compulsory for M.Sc. Money, Banking and Finance Optional for M.Sc. in Finance			
	Learning and teaching methods and delivery:  Lectures.				
	Assessment pattern:	Coursework = 50%	, 2-hour Examina	tion = 50%	
	Module Co-ordinator:	Dr A Trew			

EC5609	Financial Econometrics				
	SCOTCAT Credits:	20	SCQF Level 11	Semester:	1
	Planned timetable:	To be arranged.			
	This module will introduce the students to the theory and practice of financial econometrics. The module will begin by introducing students to the classical linear regression model and a number of issues regarding its application to real world data. The module will then develop a number of time-series techniques that can be applied to the study of financial economics. Topics covered include: the linear univariate stochastic model, multivariate models, unit root processes and co-integration. By the end of the module students should be able to undertake empirical analysis using financial data.				
	Programme module type: Compulsory for M.Sc. in Finance, and M.Sc. in Money, Banking and Finance				
	Learning and teaching methods and delivery:  2 lectures, 1 tutorial.				
	Assessment pattern:	sment pattern: Coursework = 50%, 2-hour Examination = 50%			
	Module Co-ordinator:	Dr L Barbopoulos			

# EC5610 Mergers and Acquisitions SCOTCAT Credits: 20 SCQF Level 11 Semester: 2 Planned timetable: To be arranged.

This module aims to introduce to students the key issues on mergers and acquisitions (M & A) literature. They will develop their ability critically to understand issues such as (a) regulatory and strategic considerations, takeover tactics, and takeover defences, (b) target firm valuation, (c) M & A activity (d) empirical tests of both the short- and the long-run performance, (e) cross-border acquisitions and their main differences with domestic ones and (f) different game theoretical approaches on M & A.

Programme module type:	Optional for M.Sc. in Finance and in Money, Banking and Finance.
Learning and teaching methods and delivery:	2 lectures, 1 tutorial.
Assessment pattern:	Coursework = 50%, 2-hour Examination = 50%
Module Co-ordinator:	Dr L Barbopoulos

# **EC5611 Portfolio Theory and Management**

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SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Planned timetable:	To be arranged.			

This module aims to develop students' knowledge and understanding of key issues in asset allocation and portfolio composition/management at an advanced level. Moreover it aims to provide students with the opportunity to develop their ability to critically understand current theoretical and empirical research in the field of portfolio management and the implications of such research into alternative portfolio composition and management strategies.

Programme module type:	le type: Compulsory for M.Sc. in Finance	
	Optional for M.Sc. in Money, Banking and Finance.	
Learning and teaching methods and delivery:		
Assessment pattern: Coursework = 30%, 2-hour Examination = 70%		
Module Co-ordinator:	Dr L Barbopoulos	
Lecturer(s)/Tutor(s):	Dr L Barbopoulos, Dr G Shea	

#### **EC5699 Finance Dissertation**

SCOTCAT Credits:	60	SCQF Level 11	Semester:	Whole Year		
Planned timetable:	At times to be arranged with supervisor.					

A dissertation in the form of a substantial extended theoretical/analytical/empirical essay/project on a topic relevant and appropriate to the M.Sc.. A selection of potential topics will be identified by members of staff and it is expected that most students will choose one of these. Limited supervision is available, notably to agree topics and outlines and to check progress, but students are expected to work largely on their own initiative.

Programme module type:	Compulsory for M.Sc. in Finance	
Learning and teaching methods and delivery:	Supervision.	
Assessment pattern:	Coursework (Dissertation) = 100%	
Module Co-ordinator:	Dr G Shea	

#### **EC5722 Risk Management**

SCOTCAT Credits:	20	SCQF Level 11	Semester:	2	
Planned timetable:	To be arranged.				

This module provides the student with an introduction to classical techniques in risk and insurance. The implementation of sound quantitative risk models to assess and insure against risk is a vital concern for all financial institutions. The module provides a comprehensive treatment of the theoretical concepts and modeling techniques of quantitative risk management, and provides students with practical tools to solve real world problems. Specific topics covered include: portfolio management, real options, operational risk, credit risk and pension fund modeling.

Programme module type:	Optional for M.Sc. in Finance or M.Sc. in Money, Banking and Finance		
Pre-requisite(s):	EC5601 Anti-requisite(s):		
Learning and teaching methods and delivery:	Lectures and seminars.		
Assessment pattern:	Coursework = 50%, 2-hour Examination = 50%		
Module Co-ordinator:	Dr J Jin		

#### **EC5801 Money and Banking**

SCOTCAT Credits: 20		SCQF Level 11	Semester:	1
Planned timetable:	To be arranged.			

This module provides an introduction to the economics of money, banking and financial markets. It aims to present students with a general overview of key monetary and financial market phenomena, the basic workings of financial and money markets and the tools and conduct of monetary policy. The module covers topics such as how financial markets work, and the impact of financial markets on the domestic and international economic system. In addition, the module focuses on: the role of money in the economy; different monetary policy tools; and the conduct and transmission mechanisms of monetary policy.

Programme module type:	Compulsory for M.Sc. in Money, Banking and Finance		
Learning and teaching methods and delivery:	Lectures and tutorials.		
Assessment pattern:	Coursework = 50%, 2-hour Examination = 50%		
Module Co-ordinator:	Dr A Trew		

#### EC5899 Dissertation in Money, Banking and Finance

SCOTCAT Credits:	60	SCQF Level 11	Semester:	Whole Year
Planned timetable:	To be arranged.			

A dissertation in the form of a substantial extended theoretical/analytical/empirical essay/project on a topic relevant and appropriate to the M.Sc. A selection of potential topics will be identified by members of staff and it is expected that most students will choose one of these. Limited supervision is available, notably to agree topics and outlines and to check progress, but students are expected to work largely on their own initiative.

Programme module type:	Compulsory for M.Sc. in Money, Banking and Finance	
Learning and teaching methods and delivery:	Supervision.	
Assessment pattern:	Coursework (Dissertation) = 100%	
Module Co-ordinator:	Dr G Shea	

EC5901 In	5901 International Finance					
S	COTCAT Credits:	20	SCQF Level 11	Semester:	1	
P	lanned timetable:	To be arranged.				
ra Tl	The module will cover key issues in international finance. Topics will include analyzing models of exchange rate determination, both nominal and real; and analysis of the determinants of international capital flows. The module will introduce a range of analytical models, together with a range of empirical and policy-oriented material.					
P	rogramme module type:	Compulsory for M.Sc. in Finance, and M.Sc. in Money, Banking and Finance				
	earning and teaching nethods and delivery:	Lectures and tutorials.				
A	ssessment pattern:	Coursework = 50%, 2-hour Examination = 50%				
N	Module Co-ordinator:	Dr G Forgues-Puccio				