

## Masters in Finance and Economics

### Taught Element:

80 credits: Compulsory modules (EC5201 or EC5202), EC5203, EC5601, EC5604

60 credits: Optional modules EC5220, EC5223, EC5225, EC5605, EC5606, EC5608, EC5610, EC5611, EC5722

### MSc:

120 credits as for the Taught Element plus EC5399

### Funding Available only to applicants for this degree:

Sir Quo Wei Lee scholarship: £1,500 to the best *entrant* in September 2016

### Compulsory modules:

EC5201 Macroeconomics				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	Lectures: 11.00 am – 1.00 pm Thu, Seminar: 3.00 pm Thu.			
The module will provide a thorough advanced treatment of the core models and concepts used in modern macroeconomics; for example the infinite horizon Ramsey 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 micro-based 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. Before commencement of the module, supplementary lectures will be given on the relevant mathematical methods.				
<b>Programme module type:</b>	Either EC5201 or EC5202 is compulsory for MSc In Finance and Economics Postgraduate Programme. Compulsory for Economics Postgraduate Programme.			
<b>Anti-requisite(s):</b>	EC5801			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 x 2-hour lectures and 10 x 1-hour seminars			
<b>Assessment pattern:</b>	3-hour Written Examination = 75%, Coursework = 25%			
<b>Coursework detail:</b>	One class test to take place on Thurs 29th October at 11.00 am. One essay to be submitted by 12 noon on Friday 27th November.			
<b>Module Co-ordinator:</b>	Dr O Senay			

### Learning Outcomes

By the end of this module students should have a sound grasp of the core models and concepts used in modern macroeconomics such as the Ramsey model, real business cycle models and New Keynesian models. Students should be familiar with the technical details of these models and have a good overall understanding of the debates relating to the empirical performance of each modelling approach, especially in the light of macroeconomic events before and during the

recent economic crisis. Finally, students should have a good understanding of the policy debates relating to the different modelling approaches.

**Course Outline**

The module content and the balance between topics will be updated each year to reflect current research themes. The main topics will be selected from the following:

1. Basic infinite horizon models
2. Economic growth
3. Real business cycle theory
4. Nominal rigidities and the new Keynesian model.
5. Time inconsistency and monetary policy
6. Rigidities in credit markets
7. Rigidities in labour markets
8. Fiscal policy and budget deficits

Suitable texts and reference books for this course are the following (additional readings and an electronic library list will be provided at the beginning of the lectures):

1. Barro, R. J. and X. Sala-i-Martin, 2004, *Economic Growth*, 2nd edition, MIT Press.
2. Blanchard O. and S. Fischer, 1989, *Lectures in Macroeconomics*, MIT Press.
3. Gali, J., 2014, *Monetary Policy, Inflation and the Business Cycle*, 2<sup>nd</sup> edition, Princeton University Press.
4. Heijdra, B. J. and F. van der Ploeg, 2000, *The Foundations of Modern Macroeconomics*, Oxford University Press.
5. Ljungqvist L. and T. Sargent, 2004, *Recursive Macroeconomic Theory*, MIT Press.
6. Romer, D. 2011, *Advanced Macroeconomics*, 4th edition, McGraw-Hill.
7. Stokey, N. and R. E. Lucas 1989 *Recursive Methods in Economic Dynamics*, Harvard University Press.
8. Walsh, C. E., 2003, *Monetary Theory and Policy*, 2nd edition, MIT Press.

Indicative module information based on 2015-2016

EC5202 Microeconomics				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	Lectures: 11.00 am – 1.00 pm Mon, Seminars: 4.00 pm Mon.			
<p>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. Before commencement of the module, supplementary lectures will be given on the relevant mathematical methods.</p>				
<b>Programme module type:</b>	Either EC5201 or EC5202 is compulsory for MSc In Finance and Economics Postgraduate Programme. Compulsory for MSc in Economics Postgraduate Programme.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 12 x 2-hour lectures and 10 x 1-hour seminars over the semester.			
<b>Assessment pattern:</b>	3-hour Written Examination = 75%, Coursework = 25%			
<b>Coursework detail:</b>	One class test to take place on Tuesday 3rd November. One technical essay to be submitted by 12 noon on Tuesday 17th November.			
<b>Module Co-ordinator:</b>	Dr M Negri, Dr K Ozbek			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Negri, Dr K Ozbek			

### Learning Outcomes

By the end of the module students will:

1. Have received graduate-level training in the fundamental concepts, theories and methods of microeconomics
2. Be able to analyse microeconomic phenomena in an academic or professional context
3. Be able to apply the learned theories to suitable problems arising in other branches of economics
4. Be prepared for further study and research in microeconomic theory

### Course Outline

1. Consumer Theory
2. Producer Theory
3. General Equilibrium Theory
4. Choice under Risk and Uncertainty
5. Game Theory and Applications
6. Information Economics

## Economics & Finance - Economics MSc – 2016/7 – February 2016

The main textbooks for the module are:

- G. A. Jehle and P. J. Reny, *Advanced Microeconomic Theory*, 3rd Edition, Prentice Hall, 2011 (*relevant for all parts*).
- A. Mas-Colell, M. D. Whinston and J. R. Green, *Microeconomic Theory*, Oxford University Press, 1995 (*relevant for all parts*)

Other excellent textbooks that may be useful:

- D. Kreps, *Microeconomic Foundations I: Choice and Competitive Markets*, Princeton University Press, 2012 (*relevant for parts 1-4*)
- R. Gibbons, *A Primer in Game Theory*, Prentice Hall, 1992 (*relevant for part 6*)
- J. Riley, *Essential Microeconomics*, Cambridge University Press, 2012 (*relevant for all parts*)
- H. Varian, *Microeconomic Analysis*, 3rd Edition, Norton, 1992 (*relevant for parts 1-3*)
- M. Maschler, E. Solan and S. Zamir, *Game Theory*, Cambridge University Press 2013 (*relevant for part 6*)

Copies of all these titles are available in the Library's short loan collection. Some of them are also available as e-books through the Library website.

Indicative module information based on 2015-2016

EC5203 Econometric Methods and Applications				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	Lectures: 11 am – 1pm Wed.			
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.				
<b>Programme module type:</b>	Compulsory for MSc in Finance and Economics Postgraduate Programme.			
<b>Anti-requisite(s):</b>	EC5609	<b>Required for:</b>	EC5221	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 x 2-hour lectures, 8 x 1-hour tutorials, 2 x 2 computing labs over the semester.			
<b>Assessment pattern:</b>	Examination/coursework weighting under review – final weighting will be confirmed before the start of 2016/7.			
<b>Coursework detail:</b>	Eight problem sets (in weeks 2-5 & 7-10). Class Test on Wed 21st Oct. Project to be submitted by 12 noon on Thurs 26th Nov.			
<b>Module Co-ordinator:</b>	Dr I Merkurieva			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Merkurieva			

### Learning Outcomes

It is intended that by the end of the course, students will have acquired

- a sufficient understanding of probability and statistics to appreciate some modern econometric methods
- a sufficient grounding in econometric techniques for the reading and understanding of applied econometrics articles
- the ability to use Stata to write do-files that read in and manipulate data, estimate models, conduct tests, and report results by producing readable graphics and tables
- the ability to pursue further studies in econometrics

### Course Outline

Topics include (but may not be limited to):

- The classical linear model and least squares
  - Large-sample theory and hypothesis testing
  - Generalized method of moments
  - Endogeneity, instrumental variables and identification
  - Maximum likelihood estimation
  - Topics in microeconometrics

Textbook recommendations will be given in the lectures.

EC5601 Investment Analysis				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	Lectures: 2.00 pm – 4.00 pm Thu			
<p>This module introduces the basic concepts of investment value analysis. Investments cover real economic projects such as those undertaken by corporations and governments, as well as financial investments, which are regularly priced and traded in financial markets. 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 and asymmetric information. The tradeoff between risk and return is defined, and economic models of how risks and returns are determined and traded in financial markets are applied to solve any investment analysis problem. The valuation problems covered in this module involve corporate investments, a wide range of corporate liabilities such as shares and bonds, and associated financial contracts such as options. The module presents a standard framework to analyse agency problems that prevail in corporate financial decisions such as CEO compensation and performance assessment.</p>				
<b>Programme module type:</b>	Compulsory for MSc in Finance and Economics Postgraduate Programme. Compulsory for MSc in Finance Postgraduate Programme.			
<b>Required for:</b>	EC5604, EC5606, EC5722			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures (x 9 weeks) and 1-hour seminars (x 3 weeks)			
<b>Assessment pattern:</b>	2-hour Written Examination = 50%, Coursework = 50%			
<b>Additional Examination detail:</b>	Structure: One compulsory question and one question to be answered from a choice of two. Questions consist of several parts.			
<b>Coursework detail:</b>	Class Test 1 to be held on 8th Oct (10%) Class Test 2 to be held on 29th Oct (20%) Class Test 3 to be held on 12th Nov (20%)			
<b>Module Co-ordinator:</b>	Dr L Chollete			

### Learning Outcomes

You will learn the following:

- The economic concepts of investment, return and risk
- How the concepts of return and risk fit into a standard valuation model for investments – the Capital Asset Pricing Model (CAPM)
- The economic concept of market efficiency and the implications of market efficiency for doing investment valuation
- The significant impact of market inefficiencies the form of information asymmetries, upon investment analysis
- The basic analysis of agency problems inherent in CEO compensation and corporate decisions
- The basic measures of investment value such as Net Present Value (NPV) and Weighted Average Cost of Capital (WACC)
- The economic concept of an investment option and learn some basic methods of valuing options
- How to conduct investment analysis in settings of statistical uncertainty by using decision tree analysis
- How to construct solutions to investment analysis problems by modelling value, risks and returns in relation to the statistical uncertainties surrounding them

### Course Outline

This module will use material from the instructor's lecture notes, as well as the following text:

## Economics & Finance – Finance and Economics MSc – 2016/7 – February 2016

Brealey, R., Myers, S. and Allen, F., 2011. *Principles of Corporate Finance*, 10<sup>th</sup> (Global) Edition. McGraw Hill.

Topics Include:

- Present Value of Future Cash Flows
- NPV and Investment Decisions
- Risk Diversification and Beta
- CAPM and Discount Rates
- Capital Budgeting and Risk
- Decision Tree Analysis
- Agency problems and Compensation
- Market Efficiency
- Financial Investment and Security Issues
- Option Valuation
- Corporate Debt Policies in Efficient Markets
- Default Risk and Extreme Events
- Impacts of Income and Corporate Taxation

*Indicative module information based on 2015-2016*

EC5604 Corporate Finance				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	To be arranged.			
<p>In this module we investigate the problem of how a collection of corporate liabilities is 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.</p>				
<b>Programme module type:</b>	Compulsory for MSc in Finance and Economics Postgraduate Programme. Compulsory for MSc in Finance Postgraduate Programme. Optional for MSc in Economics Postgraduate Programme.			
<b>Pre-requisite(s):</b>	EC5601			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures (x 9 weeks) and 3 x 1-hour seminars over the semester			
<b>Assessment pattern:</b>	2-hour Written Examination = 50%, Coursework = 50%			
<b>Additional Examination detail:</b>	Structure: One compulsory question and one question to be answered from a choice of two. Questions consist of several parts			
<b>Coursework detail:</b>	Class Test 1 to be held on 26th Feb (10%). Class Test 2 to be held on 1st Apr (20%). Class Test 3 to be held on 11th Apr (20%).			
<b>Module Co-ordinator:</b>	Dr G Shea			

### Learning Outcomes

- You will learn about the formal structure of corporate liabilities (debt, equity and options) and how the tools that were mastered in EC5601 can be as successfully applied to the valuation of corporate liabilities as they can be applied to the valuation of corporate assets.
- You will learn how the valuation of corporate liabilities can be affected by the value of corporate assets.
- You will learn how the valuation of corporate liabilities can be affected by corporate financing decisions, such as dividend or debt policies.
- You will learn how the concept of market efficiency importantly modifies the interaction between corporate asset and corporate liability values.
- You will learn how the techniques of corporate liability evaluation are central to understanding the wider implications of corporate restructuring such as mergers, acquisitions and spin-offs.
- You will learn importantly how different corporate tax and personal income tax regimes affect the choice of appropriate tools of analysis.
- You will develop an ability to judge the appropriateness of different valuation techniques in the face of tax complications and statistical uncertainty.



**Course Outline**

This module continues to use the single textbook in addition to lecture material: Brealey, Richard A., Myers, Stewart C., Allen, Franklin, Principles of Corporate Finance, Tenth (Global) edition, 2011, McGraw-Hill.

Topics include:

- Dividend Irrelevance
- Debt Policy without Taxes
- Debt Policy with Financial Distress and Agency Costs
- Investment and Financing Interactions
- Levered Buyouts
- Signalling and Investment Choice
- Convertible Debt
- (possibly) Warrants

*Indicative module information based on 2015-2016*

**Compulsory for the MSc:**

EC5399 Dissertation				
<b>SCOTCAT Credits:</b>	60	SCQF Level 11	<b>Semester:</b>	Whole Year
<b>Academic year:</b>	NOT CURRENTLY RUNNING.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module is designed to develop students' independent research, writing and presentation skills and to enable them to apply financial, economic, mathematical and/or statistical/econometric analysis to a selected topic in Finance and Economics. The dissertation must be on a topic either in Finance or in Economics. A preliminary outline is submitted in late November when students are assigned a supervisor. Students submit a final synopsis in late January. Dissertations should be at least 10,000 and at most 15,000 word long. Dissertations have to be written individually and should be submitted in final form by mid-August. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for MSc in Finance and Economics Postgraduate Programme.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Occasional lectures.			
<b>Assessment pattern:</b>	Coursework = 10%, Dissertation = 90% (assessment weighting under review – final position will be confirmed before the start of 2016/7)			
<b>Module Co-ordinator:</b>	Dr M La Manna			

Indicative module information based on 2015-2016

Optional modules approved for this programme *(not all are available every year):*

EC5220 Game Theory				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	NOT CURRENTLY RUNNING.			
<b>Planned timetable:</b>	2.00 pm Mon.			
<p>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.</p>				
<b>Programme module type:</b>	Optional for MSc in Economics, MSc in Finance and Economics, and MSc in Money, Banking and Finance Postgraduate Programmes.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures, occasional tutorials.			
<b>Assessment pattern:</b>	3-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Prof R McCrorie			
<b>Lecturer(s)/Tutor(s):</b>	Prof P Manzini, Professor M Mariotti, Dr A Nichifor, Dr Y Gerasimou			

Indicative module information based on 2015/2016

EC5223 Industrial Organisation				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	NOT CURRENTLY RUNNING.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module will provide a thorough advanced treatment of the core models and concepts used in modern analysis of industrial organisation. It will examine such questions as: Why are there firms? What determines the boundary of a firm? What shapes the way a firm is structured? Industrial economics attempts to answer to these (and related) questions. Broadly, one could view it as a specialised branch of microeconomics, and its focus is on the structure and mechanisms governing markets and on the way firms compete against each other in the pursuit of their private interests. Topics to be covered include: theories of the firm; monopoly pricing and price discrimination; an overview of game theory; vertical control; oligopoly pricing; product differentiation; strategic behaviour and entry deterrence; the economics of information; signalling and asymmetric information about product quality; problems in concentrated industries; and bounded rationality. Students are expected to have a strong undergraduate level training in microeconomics and relevant mathematical and statistical techniques.</p>				
<b>Programme module type:</b>	Optional for MSc in Economics, MSc in Finance and Economics,,MSc in Money, Banking and Finance Postgraduate programmes.			
<b>Pre-requisite(s):</b>	Admission to MSc Economics or a strong undergraduate training in microeconomics and relevant mathematical and statistical techniques.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures, occasional tutorials.			
<b>Assessment pattern:</b>	3-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Prof R McCrorie			
<b>Lecturer(s)/Tutor(s):</b>	Prof P Manzini, Professor M Mariotti, Dr A Nichifor, Dr Y Gerasimou			

Indicative module information based on 2015-2016

EC5225 Experiments in Economics				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	Lectures: Tue and Thu 2.00 – 4.00 pm			
<p>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 various 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 empirical evidence collected in the laboratory 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.</p> <p>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 of trading in markets and games. Students are expected to have undergraduate level training in microeconomics and statistics.</p>				
<b>Programme module type:</b>	Optional for MSc in Economics, MSc in Finance and Economics , MSc in Money, Banking, and Finance Postgraduate Programmes.			
<b>Pre-requisite(s):</b>	Admission to MSc Economics or a strong undergraduate training in microeconomics and relevant mathematical and statistical techniques.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lecture (x 9 weeks) 2-hour tutorials (x 4 weeks)			
<b>Assessment pattern:</b>	3-hour Written Examination = 75%, Coursework (1,500-word Technical Essay) = 25%			
<b>Coursework detail:</b>	One Technical Essay due by 12 noon on Thurs 14th April.			
<b>Module Co-ordinator:</b>	Prof M Costa Gomes			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Costa-Gomes			

### Learning Outcomes

Through this course the student should acquire a knowledge and understanding of:

- The methodology of experimental economics and its concepts.
- How to use experimental methods to answer an economics-related research question.
- How to design an economics experiment to investigate an economics-related research question.
- How to critically analyse an economics experiment.
- How to analyse data from economics experiments.

### Course Outline

This module will provide a treatment of the methodology of experimental economics, and will review stylized facts and recent developments of their use in different fields of economics. The general outline of the lecture material to be covered will be as follows:

1. Experimental Methods in Economics.
2. Experimental Double and Posted Offer Auctions: Stylized Facts and Recent Developments.
3. Experimental Double and Posted Offer Auctions: Spot and Forward Markets.
4. Experimental Asset Markets: Stylized Facts and Recent Developments.
5. Experiments on Structured Bargaining: Finite Alternating-Offer Bargaining Games and their Stylized Facts
6. Experiments on Strategic-Form Games: Stylized Facts and Behavioural Models

*Indicative module information based on 2015-2016*

EC5605 Monetary Policy				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	11.00 am – 1.00 pm and 4.00 pm – 6.00 pm Thu and 10.00 am – 12.00 noon Fri Weeks 1 – 3 only.			
This module will cover key issues in monetary policy. Topics will include: the case for price stability; time inconsistency and policy; the trade-off between inflation bias and output stabilisation; unconventional monetary policies; inflation targeting and other monetary frameworks; and the conduct of monetary policy in leading countries.				
<b>Programme module type:</b>	Compulsory for MSc in Money, Banking and Finance Postgraduate Programme. Optional for MSc in Economics, MSc in Finance and Economics (Postgraduate Programmes).			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures (x 9 – 3 lectures per week weeks 1 – 3 only), 3 x 1-hour tutorials over the semester.			
<b>Assessment pattern:</b>	2-hour Written Examination = 50%, Coursework = 50%			
<b>Additional Examination detail:</b>	Structure: two sections, one section consisting of formal/mathematical questions, the other section of essays			
<b>Coursework detail:</b>	One technical assignment to be submitted by 12 noon on Friday 11th March. One essay to be submitted by 12 noon on Friday 8th April.			
<b>Module Co-ordinator:</b>	Prof A Hughes-Hallett			

### Learning Outcomes

By the end of this module students should have acquired an understanding of:

- The welfare costs of inflation and the case for price stability
- The concept of rules versus discretion and inflation bias in the operation of monetary policy
- The concept of central bank independence
- The nature of Inflation Targeting and Interest rate feedback rules
- The concepts of determinacy and learning as criteria for monetary policy rules

### Course Outline

1. The role of money, costs of inflation and the case for price stability.
2. Rules versus discretion – time inconsistency and monetary policy.
3. Credibility, reputation and the inflation bias.
4. Central bank independence, conservative central banks and the trade-off between the inflation bias and output stabilisation.
5. Inflation targeting.
6. Interest rate feedback rules.
7. Unconventional monetary policies.
8. Asset bubbles and financial stability.
9. Central bank transparency.
10. The conduct of monetary policy in the UK, US and Europe.

EC5606 Corporate Governance and Risk				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Academic year:	2015/6			
Planned timetable:	9.00 am Tue.			
Corporate governance deals with the question how a firm should be set up in order to ensure that investors get a return on their investment. A firm with poor corporate governance will find it difficult to obtain necessary investments and therefore has a severe competitive disadvantage. This course provides students with an opportunity to gain a deeper understanding about what good corporate governance is and why it matters. Key components: (1) law and corporate governance, boards of directors, ownership and firm performance, CEO compensation, merger and acquisition, shareholder activism, executive compensation, insider trading, etc.; (2) introduction to principal-agent theory with applications to management-shareholders and investor-investee relationships; (3) CEO compensation and risk-taking incentives, risk bias in project selection, etc. Some recent papers will be studied.				
Programme module type:	Optional for MSc in Economics, MSc in Finance, MSc in Finance and Economics, MSc in Money, Banking and Finance Postgraduate Programmes.			
Learning and teaching methods and delivery:	<b>Weekly contact:</b> 18 lectures and 3 x 1-hour seminar/tutorials over the semester.			
Assessment pattern:	2-hour Written Examination = 50%, Coursework = 50%			
Additional Examination detail:	Structure: choice of three out of six questions.			
Coursework detail:	One class test (20%) on 4th April. One essay (30%) of 1,500 words, by noon on 22nd April.			
Module Co-ordinator:	Dr G Zhu			

### Learning Outcomes

Students will be introduced to the current understanding of corporate governance under asymmetric information and uncertainty. In particular they will learn about:

- Why corporate governance matter?
- What is the role of ownership structure, boards of directors, CEO compensation, etc., in corporate governance? For instance, the benefit and cost of the separation of ownership and control, the market for takeovers and its effectiveness in regulating managers, etc. How to set CEO incentives.
- Understanding different corporate governance system in the world.

### Reading

No single textbook covers the syllabus for this module. Detailed reading list will be handed out at the start of the course. Recent papers will be studied. For students who are interested in getting an overview of corporate governance in advance:

- Shleifer, Andrei and Robert W. Vishny (1997): A survey of corporate governance, *Journal of Finance* 52, 737-783.
- Tirole, Jean. 2005. *The Theory of Corporate Finance* (chapter 1). Princeton, NJ: Princeton University Press.

### Note on essay:

The topic of the essay will be announced **24 hours** before the deadline.



EC5608 Financial Intermediation				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	11.00 am – 1.00 pm Wed			
This module will cover the main theoretical issues involved in financial intermediation, from the existence of financial intermediaries 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 contemporary issues in existing financial systems.				
<b>Programme module type:</b>	Compulsory for MSc in Money, Banking and Finance Postgraduate Programme. Optional for MSc in Economics, MSc in Finance, MSc in Finance and Economics Postgraduate Programmes.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 18 lectures and 3 seminars over the semester.			
<b>Assessment pattern:</b>	2-hour Written Examination = 50%, Coursework = 50%			
<b>Coursework detail:</b>	One Class Test (25%) - Wed 6th April. One essay of 1,500 words (25%) – due by 12 noon on Thurs 21st April.			
<b>Module Co-ordinator:</b>	Dr A Trew			

### Learning Outcomes

By the end of this module students will have acquired an understanding of:

- why financial intermediaries exist and why they use particular contracts
- the industrial organization approach to banking
- why credit may be rationed in equilibrium
- the reasons why there may be instability and failures in the banking system
- the justification for and operation of regulatory measures such as capital adequacy requirements and deposit insurance
- the justification for and role of central banks

### Course Outline

1. Money and Financial Intermediation
  - Understanding the existence of money and financial intermediaries
  - Fundamental concepts
  - Frameworks for analysis
2. Financial Intermediation - Banking
  - Banking business risks
  - Theories of financial intermediation
  - Industrial Organisation approach to banking
3. Optimal Contracting
  - Bank-borrower relationships
  - Credit rationing
4. Banking Sector Problems
  - Bank runs, bank failures and systemic risk
5. Regulation
  - Capital adequacy requirements
  - Deposit Insurance
  - “Too big to fail”

6. Rationale for Central Banks
  - Protecting bank reputation, protection of depositors
  - Lender of last resort
  - Institutional separation between supervisory and monetary agencies
  - Free banking

### Basic Reading

Freixas, Xavier and Rochet, Jean-Charles, 2008, *Microeconomics of Banking*, MIT Press.  
Greenbaum, Stuart and Anjan Thakor, 2007, *Contemporary Financial Intermediation*, Elsevier.  
Matthews, Kent and Thompson, John, 2005, *The Economics of Banking*, John Wiley.  
Degryse, Hans, 2009, *Microeconometrics of banking: methods, applications, and results*, Oxford University Press.

Indicative module information based on 2015-2016

EC5610 Mergers and Aquisitions				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	NOT CURRENTLY RUNNING.			
<b>Planned timetable:</b>	4.00 pm Mon			
<p>This module aims to introduce to students the key issues on mergers and acquisitions (M &amp; 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 &amp; 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 &amp; A.</p>				
<b>Programme module type:</b>	Compulsory for MSc in Finance Postgraduate Programme. Optional for MSc in Economics, <u>MSc in Finance and Economics</u> , MSc in Money, Banking and Finance Postgraduate Programmes.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures, 1 tutorial.			
<b>Assessment pattern:</b>	2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr L Barbopoulos			

Indicative module information based on 2015-2016

EC5611 Portfolio Theory and Management				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Academic year:	2015/6			
Planned timetable:	9.00 am Mon			
This module aims to develop students' knowledge and understanding of key issues in asset pricing, asset allocation, and portfolio composition/management at an advanced level. The students will be given the opportunity to develop their ability to critically understand current research in these fields and the implications of such research into portfolio composition/management strategies.				
Programme module type:	Compulsory for MSc in Finance Postgraduate Programme. Optional for MSc in Economics, MSc in Finance and Economics, MSc in Money, Banking and Finance Postgraduate Programmes.			
Learning and teaching methods and delivery:	<b>Weekly contact</b> 10 x 2-hour lectures (Problem-solving sessions embedded in the lecture schedule)			
Assessment pattern:	2-hour Written Examination = 70%, Coursework = 30%			
Coursework detail:	1 take-home assignment to be submitted by 12 noon on Wed 13th April.			
Module Co-ordinator:	Dr G Zhu			

### Learning Outcomes/Course Outline

By the end of the module, the students will have gained an understanding of:

- Expected Return, Risk, and Risk Aversion
- Capital Allocation
- Equilibrium in Capital Markets
- Security Analysis and Portfolio Theory
- Portfolio Performance Evaluation and Rebalancing
- Fixed Income Securities

### Textbooks

The textbook for this module is: E.J. Elton, M.J. Gruber, S.J. Brown, and W.N. Goetzmann (2010), *Modern Portfolio Theory and Investment Analysis*, John Wiley & Sons Inc., (8th ed.)

Other supporting books include:

F.K. Reilly and K.C. Brown (2011), *Investment Analysis and Portfolio Management*, Thomson – South-Western, (10th ed.)

Bodie Z., Kane A., and A. Marcus (2011) *Investments and Portfolio Management*, McGraw-Hill (9th ed.)

EC5722 Risk Management				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	Weeks 1 & 2 _ - Mon – 2.00 pm – 4.00 pm , Week 3 onwards Mon 3.00 pm – 5.00 pm			
This module provides the student with an introduction to standard 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 modelling techniques of quantitative risk management. It provides students with practical tools to solve real world problems, in the context of portfolio management and credit risk. A major theme underlying all topics is the importance of ambiguity, especially regarding partial knowledge of asset distributions and investor preferences. Throughout we will relate the class discussion to current economic conditions.				
<b>Programme module type:</b>	Optional for MSc in Economics, MSc in Finance MSc in Finance and Economics, MSc in Money, Banking and Finance Postgraduate Programmes.			
<b>Pre-requisite(s):</b>	EC5601			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture per week and seminars/tutorials to be arranged			
<b>Assessment pattern:</b>	2-hour Written Examination = 50%, Coursework = 50%			
<b>Coursework detail:</b>	Class Test 1: Tuesday 15th February Class Test 2: Tuesday 4th April			
<b>Module Co-ordinator:</b>	Dr L Chollete			

### Learning Outcomes

Students will learn about the following:

- Financial markets and the fundamental characteristics of risks
- The objectives of risk management
- How risk managers endeavour to reduce risk
- The basic technical models used for risk management
- Financial Crises and analysis of extreme events
- Lessons from recent experience in financial markets

### Course Outline

Material will be taken from the following textbook, as well as the instructor's lecture notes.

### Texts:

Christoffersen, P., 2011. *Elements of Financial Risk Management* (2nd Ed.), Academic Press.  
Embrechts, P., R. Frey, A. McNeil, 2015. *Quantitative Risk Management* (2nd Ed.), Princeton Press.

Hull, J., 2015. *Risk Management and Financial Institutions* (4th Ed.), John Wiley and Sons.

In particular, the following topics will be covered:

- Basic Concepts in Risk Management
- Dependence and Portfolio Risk
- Extreme Events and Ambiguity
- Financial Institutions and Instruments
- Greeks and Interest Rate Risk
- Value-at-Risk and Volatility
- Copula modelling of Dependence
- Regulation and the 2007 Crunch

- Methods for Managing Different Risks

*Indicative module information based on 2015-2016*