School of Economics & Finance

Economics & Finance (EC) modules

**EC3301 Econometrics**

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<th>SCQF Level 9</th>
<th>Semester</th>
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<td>Planned timetable:</td>
<td>9.00 am - 11.00 am Tue.</td>
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The module develops student understanding of the classical linear econometric model (ordinary least squares). This will cover a range of topics including: estimation and inference in multivariate regression models; the use of limited dependent variables; large sample properties of OLS estimators; multicollinearity and heteroskedasticity. Student understanding of key econometric concepts and their application to economics will be developed, allowing them to estimate, interpret, test and critically evaluate economic relationships. The module will develop students applied skills through the use of appropriate econometric software.

**Pre-requisite(s):** Permission of the economics honours adviser

**Learning and teaching methods of delivery:**
- **Weekly contact:** 20 hours of lectures over 11 weeks, 2-hour practical classes (x 4 weeks) 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 33 hours
- **Guided independent study:** 167 hours

**Assessment pattern:**
- **As defined by QAA:** Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:** 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:** 2-hour Written Examination = 100%

**Module coordinator:** Dr M R Polisson

**Module teaching staff:** Dr M Polisson

**EC3302 Decision and Game Theory**

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Decision and Game Theory focuses on the decisions of economic agents and their behaviour in interactive situations. This module will teach the basics of strategic thinking, aiming to guide students' understanding of the common roots of many social and economic dilemmas. Beginning with the discussion of simple games, analytic tools will be introduced progressively leading the discussion of numerous applications like auctions, bargaining, oligopoly, financing decisions, voting, and many more.

**Pre-requisite(s):** Permission of the economics honours adviser

**Learning and teaching methods of delivery:**
- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

**Assessment pattern:**
- **As defined by QAA:**
  - Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:**
  - Coursework (Bi Weekly Quizzes) = 25%, Examination (Class Test = 15%, 2-hour Written Examination = 60%) = 75%

**Re-assessment pattern:** 2-hour Written Examination = 100%

**Module coordinator:** Prof A Zapechelnyuk
**EC3303 Economic Growth**

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Growth is one of the core issues in Economics which has intrigued economists for more than a century. In spite of their effort, many questions remain unanswered, making this one of the most interesting and challenging field in Economics. A recurring theme of this course will be the question Why are some countries so rich, while others are so poor? The main objective of this course will be to apply economic theory to better understand and interpret empirical observations with respect to economic development and growth. In this course, we will study the main facts characterizing economic development and growth over time and across countries and the ability of theoretical models to account for these facts.

**Pre-requisite(s):** Permission of the economics honours adviser

**Learning and teaching methods of delivery:**

| Weekly contact: | 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks). |
| Scheduled learning: | 25 hours |
| Guided independent study: | 175 hours |

**Assessment pattern:**

*As defined by QAA:*
- Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%

*As used by St Andrews:*
- 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:**
- 2-hour Written Examination = 100%

**Module coordinator:** Dr A W Trew

**Module teaching staff:** Dr Alex Trew

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**EC3304 Mathematical Economics**

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The module covers the basic mathematical tools used in economic theory. Good knowledge of elementary calculus will be assumed. The main topics are multivariate calculus, concavity and convexity, optimization theory, differential equations, and dynamic optimization. The main goal is that students learn to use the tools, so the emphasis will be on techniques and their applications to fundamental economic models rather than abstract theory.

**Pre-requisite(s):** Permission of the economics honours adviser

**Learning and teaching methods of delivery:**

| Weekly contact: | 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks). |
| Scheduled learning: | 25 hours |
| Guided independent study: | 175 hours |

**Assessment pattern:**

*As defined by QAA:*
- Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%

*As used by St Andrews:*
- 2-hour Written Examination = 50%, Coursework (incl. 2 x Class Test 25% each) = 50%

**Re-assessment pattern:**
- 2-hour Written Examination = 100%

**Module coordinator:** Dr M Zhang
EC3305 Incentives, Contract and Markets

SCOTCAT Credits: 20  SCQF Level 9  Semester 2

Academic year: 2018/9

Planned timetable: To be arranged.

This module will address economic institutions when agents interact under informational asymmetries. The main models of the theory of contracts, particularly the basic models of adverse selection, signalling, and moral hazard, as well as the theory of mechanism and market design, will be discussed with emphasis on their applications for understanding the internal organisation of firms, taxation, regulation, insurance and labour markets, education, and many other aspects of economics.

Pre-requisite(s): Permission of the economics honours adviser

Learning and teaching methods of delivery: Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).

Scheduled learning: 25 hours  Guided independent study: 175 hours

Assessment pattern: As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%

As used by St Andrews: 2-hour Written Examination = 50%, Coursework (incl. 2 x Class Tests 25%) = 50%

Re-assessment pattern: 2-hour Written Examination = 100%

Module coordinator: Dr L Bridet

Module teaching staff: Dr Luc Bridet

EC3306 Economic Fluctuations

SCOTCAT Credits: 20  SCQF Level 9  Semester 2

Academic year: 2018/9

Planned timetable: To be arranged.

Economic growth is not steady but features a series of expansions and contractions. These economic fluctuations are of primary concern to economic policy makers and have been the source of some of the most intense debates in all of economics. A recurring theme of this course will be the question Where do economic booms and busts come from? and the module’s main objective is to provide an advanced understanding of the macroeconomics behind this volatility. Students will be introduced to the main facts characterizing economic fluctuations as well as a range of formal analytical models that will help develop their understanding of key macroeconomic and monetary relationships. Finally, they will examine how well these models account for the observed facts.

Pre-requisite(s): Permission of the economics honours adviser

Learning and teaching methods of delivery: Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).

Scheduled learning: 25 hours  Guided independent study: 175 hours

Assessment pattern: As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%

As used by St Andrews: 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

Re-assessment pattern: 2-hour Written Examination = 100%

Module coordinator: Dr R L Stefanski

Module teaching staff: Dr R Stefanski
EC3307 Computational Economics

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Economics has an array of very useful and advanced computational tools that are not usually taught at the undergraduate level. To address this issue and to make students familiar, and even proficient, with these tools, this module will present a methods-based computational economics course. We will develop some basic but fundamental economic problems (both macro and micro) and teach students how to solve those problems using a programming language like Mathematica or Matlab. The ability to program is crucial in the modern world and this course will endow students with an invaluable tool as well as an important edge with respect to other economics programs. Students will be given an opportunity to program and to learn to apply their new skills to solving economic problems.

**Pre-requisite(s):** Before taking this module you must pass EC3304 or pass MT1002

**Learning and teaching methods of delivery:**

**Weekly contact:** Scheduled learning: 25 hours Guided independent study: 180 hours

**Assessment pattern:**

As defined by QAA:
- Written Examinations = 25%, Practical Examinations = 0%, Coursework = 75%

As used by St Andrews:
- Written Examination (In-class Test) = 25%, Coursework = 75%

**Re-assessment pattern:** Programming Project = 100%

**Module coordinator:** Dr R L Stefanski

**Module teaching staff:** Dr R Stefanski

EC4401 Advanced Econometrics

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The module seeks to equip students with advanced skills in data analysis by introducing a number of estimation methods commonly used in economics. These include, limited dependent variable models, pooled cross-section and panel models, two-stage least squares, time series methods and simultaneous equation models. The module builds upon the knowledge of the linear regression model acquired in EC3301.

**Pre-requisite(s):** Before taking this module you must pass EC3301 or pass MT3508

**Learning and teaching methods of delivery:**

**Weekly contact:** 20 hours of lectures over 11 weeks, , 2-hour practical classes (x 3 weeks), 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).

**Scheduled learning:** 31 hours **Guided independent study:** 169 hours

**Assessment pattern:**

As defined by QAA:
- Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%

As used by St Andrews:
- 2-hour Written Examination = 50%, Coursework (incl. 2 x Class Test 25% each) = 50%

**Re-assessment pattern:** 2-hour Written Examination = 100%

**Module coordinator:** Prof J R McCrorie

**Module teaching staff:** Prof R McCrorie
### EC4402 Economic History

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An understanding of economic history lends clarity to many questions in economics. Among these are: The extent and impact of globalization; the determinants of the wealth of nations; the occurrence and impact of financial crisis; and the importance of economic institutions. Each of these putatively modern questions have long historical antecedents. We will treat these questions with a modern rigour, studying work that uses theoretical and econometric analysis.

**Learning and teaching methods of delivery:**
- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

**Assessment pattern:**
- **As defined by QAA:**
  - Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:**
  - 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:**
- 2-hour Written Examination = 100%

**Module coordinator:** Dr A W Trew

**Module teaching staff:** Dr A Trew

### EC4405 Economics of the Environment

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The aim of this module is to introduce basic ideas, methods and problems of environmental economics and policy building on current scientific evidence and a knowledge of economics. The political economy background will be emphasized. Specific problems of developing countries and their relations to the developed world will be studied.

**Learning and teaching methods of delivery:**
- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

**Assessment pattern:**
- **As defined by QAA:**
  - Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:**
  - 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:**
- 2-hour Written Examination = 100%

**Module coordinator:** Dr J Y Jin

**Module teaching staff:** Dr J Jin
### EC4407 Behavioural Economics

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Behavioural economics combines traditional neoclassical microeconomics and empirically motivated assumptions with the goal of providing a better understanding of economic behaviour and welfare in settings that range from single-person decision problems under certainty, risk or uncertainty to multi-person decision problems. The module will introduce theoretical models that deviate from the standard assumptions of rational choice in order to explain observed behavioural patterns that arise both in single-period as well as in multi-period decision problems. When relevant, policy implications/responses will also be discussed.

**Learning and teaching methods of delivery:**
- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

**Assessment pattern:**
- **As defined by QAA:**
  - Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:**
  - 2-hour Written Examination = 50%, Coursework (incl. 2 x Class Tests 25%) = 50%

**Re-assessment pattern:**
- 2-hour Written Examination = 100%

**Module coordinator:** Dr G Gerasimou

### EC4408 Industrial Organisation and Regulations

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This module is an analytical treatment of industrial organisation in a dynamic context, providing rigorous coverage of core areas of the subject, supported mostly by both theoretical models and some econometric studies. The Topics covered are as follows: Modules of intra-industry competition, including discussion in game theoretic terms; market structures, economies of scale, entry and exit; product differentiation, innovation; mergers.

**Learning and teaching methods of delivery:**
- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 37 hours
- **Guided independent study:** 163 hours

**Assessment pattern:**
- **As defined by QAA:**
  - Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:**
  - 2-Hour Written Examination = 50%, Coursework (including Class test 25%) = 50%

**Re-assessment pattern:**
- 2-Hour Written Examination = 100%

**Module teaching staff:** Dr M La Manna
EC4409 International Macroeconomics

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This module provides a comprehensive treatment of selected aspects of international macroeconomics. The course makes intensive use of mathematical techniques of exchange rate modelling. The module aims to deepen understanding of the functioning of the international monetary and financial system, and to familiarise students with some key issues in the literature of international macroeconomics.

**Learning and teaching methods of delivery:**
Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
Scheduled learning: 25 hours  Guided independent study: 175 hours

**Assessment pattern:**
As defined by QAA:
Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%

As used by St Andrews:
2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:**
2-hour Written Examination = 100%

**Module coordinator:**
Dr O Senay

EC4410 International Trade

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This module introduces basic facts and theoretical models regarding economic interconnections within an increasingly integrated world. Its aim is to provide students a global view and understanding of interdependence among all countries. Its content includes a current and an historical overview of trade and its impact on economic growth, the classic theory of free trade, recent developments in theoretical models and relevant empirical evidence and major policy issues arising in open economies that are becoming more relevant today. The module will cover traditional (neoclassical) economics and also discuss various challenges presented to such a framework, especially based on experience of developing countries.

**Learning and teaching methods of delivery:**
Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
Scheduled learning: 25 hours  Guided independent study: 175 hours

**Assessment pattern:**
As defined by QAA:
Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%

As used by St Andrews:
2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:**
2-hour Written Examination = 100%

**Module coordinator:**
Dr J Y Jin

**Module teaching staff:**
Dr J Jin
The purpose of the module is to explore the macroeconomic and monetary issues involved in European economic integration. After a historical introduction focused on the question of why the members of the EC/EU have sought a single market for trade and then monetary union, the module provides a thorough examination of the theory of optimum currency areas, including trade and capital market linkages; convergence; and the role of exchange rate stability (real or nominal) from a European perspective. We then investigate the monetary policy strategy of the ECB; the need for and use of fiscal policy in a currency union; the Stability Pact; fiscal federalism; the relationship between fiscal and monetary policy; and the desirability of fiscal rules to ensure financial sustainability. Finally, we will examine labour market difficulties and structural reform in the EU.

Learning and teaching methods of delivery:
Weekly contact: 20 hours of lectures over 10 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).

Assessment pattern:
As defined by QAA:
Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%

As used by St Andrews:
2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

Re-assessment pattern:
2-hour Written Examination = 100%
Economics & Finance - Honours Level - 2018/9 - October - 2018

### EC4415 Public Economics

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**Academic year:** 2018/9  
**Availability restrictions:** Available to General Degree students with the permission of the Honours Adviser  
**Planned timetable:** To be arranged.

This module will apply microeconomic reasoning to the study of the public sector. It will survey the scope and different modes of public intervention in the economy, with particular emphasis on the welfare state and income redistribution. It will discuss the provision and financing of public and private goods and the design of tax systems.

**Learning and teaching methods of delivery:**  
**Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).  
**Scheduled learning:** 37 hours  
**Guided independent study:** 163 hours

**Assessment pattern:**  
As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%  
As used by St Andrews: 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:** 2-hour Written Examination = 100%

**Module coordinator:** Dr M Negri  
**Module teaching staff:** Dr L Bridet and Dr M Negri

### EC4417 Financial Economics: Asset Pricing

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**Academic year:** 2018/9  
**Availability restrictions:** Available to General Degree students with the permission of the Honours Adviser  
**Planned timetable:** 2.00 pm - 4.00 pm Mon.

The main aim of this module is to provide a rigorous grounding in the theory and applications of finance and a thorough synthesis of the most important current research in finance, with a particular emphasis on the applications of the principles. The ultimate aim is to provide students with a standard approach to define, measure, as well as predict the value of financial claims 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. Both normative and positive aspects of financial theory will be investigated, together with supporting descriptive and empirical evidence.

**Learning and teaching methods of delivery:**  
**Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).  
**Scheduled learning:** 25 hours  
**Guided independent study:** 175 hours

**Assessment pattern:**  
As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%  
As used by St Andrews: 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:** 2-hour Written Examination = 100%

**Module coordinator:** Dr I Psaradellis
### EC4418 Financial Economics: Corporate Finance

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<th>Semester:</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2018/9</td>
<td></td>
<td></td>
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<tr>
<td>Availability restrictions:</td>
<td>Available to General Degree students with the permission of the Honours Adviser</td>
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<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
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</tbody>
</table>

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. 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.

#### Learning and teaching methods of delivery:

- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

#### Assessment pattern:

- **As defined by QAA:** Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:** 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

#### Re-assessment pattern:

- 2-hour Written Examination = 100%

#### Module coordinator:

Dr V Prasad

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### EC4420 Inequality and Redistribution

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF Level: 10</th>
<th>Semester:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2018/9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Available to General Degree students with the permission of the Honours Adviser</td>
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<tr>
<td>Planned timetable:</td>
<td>Tuesday 11-1pm</td>
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</table>

The module is designed to foster an understanding of economic inequality both from theoretical and practical perspectives. It mainly aims to convey how economists approach and deal with inequalities of income, wealth and consumption of inequalities of non-income variables such as health or education both between individuals and between social groups such as gender or ethnic groups. How different inequalities are assessed by international institutions such as World Bank and how relevant policies are produced in return are of main concerns of the module. The driving forces of economic inequality and its relation to other economic criteria such as growth are analysed as well from a historical global perspective.

#### Anti-requisite(s)

You cannot take this module if you take EC4520

#### Learning and teaching methods of delivery:

- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

#### Assessment pattern:

- **As defined by QAA:** Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:** 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

#### Re-assessment pattern:

- 2-hour Written Examination = 100%

#### Module teaching staff:

TBC
### EC4422 Communication and Public Engagement in Economics & Finance

<table>
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<tr>
<th>SCOTCAT Credits:</th>
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<th>SCQF Level 10</th>
<th>Semester</th>
<th>1</th>
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<tr>
<td><strong>Academic year:</strong></td>
<td>2018/9</td>
<td></td>
<td></td>
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<td><strong>Availability restrictions:</strong></td>
<td>Students must be in their Senior Honours year of a degree programme in the School of Economics &amp; Finance.</td>
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<td><strong>Planned timetable:</strong></td>
<td>To be arranged</td>
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</table>

The aim of this module is to discuss critically the approaches used and challenges faced by professional economists as they attempt to communicate their analysis, insights, results and forecasts to the general public. This may focus on a case study of a specific topics or types of communicators (think tanks, research institutes, university academics, international organisations, banks, civil servants) or address the merits of a particular modes of communication and engagement mechanisms adopted by economists (interviews, newspaper articles, letters and editorials, popular level or academic books, blogs, videos, internet forums etc).

**Learning and teaching methods of delivery:**
- **Weekly contact:** 1-hour supervision (x 2 weeks)
- **Scheduled learning:** 2 hours
- **Guided independent study:** 48 hours

**Assessment pattern:**
- As defined by QAA:
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews:
  - Coursework = 100%

**Re-assessment pattern:**
- Coursework = 100%

**Module coordinator:**
- Dr I Smith

### EC4424 The Economics of Migration

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<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF Level 10</th>
<th>Semester</th>
<th>2</th>
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<td><strong>Academic year:</strong></td>
<td>2018/9</td>
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<td></td>
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<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Available to General Degree students with the permission of the Honours Adviser</td>
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<tr>
<td><strong>Planned timetable:</strong></td>
<td>To be arranged.</td>
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The number of international migrants has rapidly grown over the last few decades. This module explores the economic determinants and consequences of international migration, and sheds light on the often controversial policy debates surrounding immigration. Students will apply basic economic theory and empirical methods to understand the decision to migrate, the effect of immigration on labour markets and government budgets, the effect of diversity on economic performance, the effect of high-skilled emigration on source countries and immigration policies. The module will have a strong focus on the empirical evidence on immigration and will train students' ability to critically assess this evidence.

**Learning and teaching methods of delivery:**
- **Weekly contact:** 2 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

**Assessment pattern:**
- As defined by QAA:
  - Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- As used by St Andrews:
  - 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:**
- 2-hour Written Examination = 100%

**Module teaching staff:**
- Dr T Barsbai
Evaluating the causal effects of economic policies is an important but complex and challenging task. The purpose of this module is to introduce students to the core methods for evaluating the causal effect of economic policies and to apply these methods in practice. It will expose students to the concept of causality and explain under which assumptions the causal effect of economic policies can be identified. The module will have a strong focus on applications and will emphasise problems that economists encounter in practice when evaluating economic policies. Empirical examples will deal mainly with policies in labour economics and development economics. The laboratory sessions will discuss important empirical studies in the field and will provide students with the opportunity to apply empirical methods hands-on using Stata.

Learning and teaching methods of delivery:
- **Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour laboratories (x 5 weeks) plus 1 optional office hour (x 12 weeks)
- **Scheduled learning:** 25 hours
- **Guided independent study:** 175 hours

Assessment pattern:
- **As defined by QAA:** Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%
- **As used by St Andrews:** 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

Re-assessment pattern:
- 2-hour Written Examination = 100%

Module coordinator: Dr T Barsbai
### EC4427 Philosophy of Economics

| SCOTCAT Credits: | 20 | SCQF Level 10 | Semester | 1 |
| Academic year: | 2018/9 |
| Availability restrictions: | Available to General Degree students with the permission of the Honours Adviser |
| Planned timetable: | To be arranged. |

Philosophy of Economics is designed as an interdisciplinary module that will aim to study theoretical, methodological and ethical foundations of economics. It will challenge the students to think and question the reasoning and implications of widely used economic models and methodologies. It will appeal to students that want to complement their basic economic understanding with a normative approach to the same material.

**Anti-requisite(s)**

You cannot take this module if you take PY4657

**Learning and teaching methods of delivery:**

**Weekly contact:** Weekly lectures (2 hours) and fortnightly tutorial (1 hour)

**Scheduled learning:** 37 hours  
**Guided independent study:** 168 hours

**Assessment pattern:**

*As defined by QAA:*

Written Examinations = 34%, Practical Examinations = 0%, Coursework = 66%

*As used by St Andrews:*

Coursework = 66%, 2-hour Written Examination - 34%

**Re-assessment pattern:**

2-hour Written Examination - 100%

**Module coordinator:** Dr T Cuhadaroglu

### EC4430 Portfolio Management

| SCOTCAT Credits: | 20 | SCQF Level 10 | Semester | 1 |
| Academic year: | 2018/9 |
| Availability restrictions: | Available to General Degree students with the permission of the Honours Adviser |
| Planned timetable: | TBC |

This module aims to develop students' knowledge and understanding of key issues in asset allocation and portfolio composition/management at an intermediate level. Several techniques available in the field of portfolio management are utilized, investigated, as well as assessed within the context of portfolio risk management and portfolio performance maximisation. Moreover, this module 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 portfolio management strategies.

**Pre-requisite(s):**

Before taking this module you must pass EC4417

**Anti-requisite(s)**

You cannot take this module if you take EC4204

**Learning and teaching methods of delivery:**

**Weekly contact:** 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).

**Scheduled learning:** 25 hours  
**Guided independent study:** 175 hours

**Assessment pattern:**

*As defined by QAA:*

Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%

*As used by St Andrews:*

2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%

**Re-assessment pattern:**

2-hour Written Examination = 100%

**Module coordinator:** Dr M C Iannino
### EC4432 Development and Finance

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF Level 10</th>
<th>Semester</th>
<th>1</th>
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<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2018/9</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Available to General Degree students with the permission of the Honours Adviser</td>
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<tr>
<td><strong>Planned timetable:</strong></td>
<td>To be arranged</td>
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</table>

This module will provide you with understanding of specific aspects of development finance, recognising that finance-related issues are increasingly important in economic development. The module is designed to introduce you to advances in both the theoretical and the empirical understanding of financial issues mainly in developing countries. This will include an examination of the starting point as well as the path to financial integration with the international economy, and will address a selection of the major issues surrounding developing markets. In the context of economic development and emerging markets, we will mainly study topics of financial repression and liberalisation; financial development; fragility and crises; microfinance; financial aid and economic development; and religion and finance.

<table>
<thead>
<tr>
<th>Learning and teaching methods of delivery:</th>
<th><strong>Weekly contact:</strong> 2 hours of lectures (x11 weeks), 1-hour tutorial (x 5 weeks) and 2 optional office hours dedicated to the module (x 12 weeks)</th>
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</thead>
<tbody>
<tr>
<td><strong>Scheduled learning:</strong> 27 hours</td>
<td><strong>Guided independent study:</strong> 166 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment pattern:</th>
<th><strong>As defined by QAA:</strong> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As used by St Andrews:</strong></td>
<td>2-hour Written Examination = 60%, Coursework (including class test 20%) = 40%</td>
</tr>
<tr>
<td><strong>Re-assessment pattern:</strong></td>
<td>2-hour written examination = 100%</td>
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<tr>
<td><strong>Module coordinator:</strong></td>
<td>Dr V Saxena</td>
</tr>
</tbody>
</table>

### EC4498 Research Project in Economics

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<th>SCOTCAT Credits:</th>
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<th>SCQF Level 10</th>
<th>Semester</th>
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<td><strong>Academic year:</strong></td>
<td>2018/9</td>
<td></td>
<td></td>
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<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Available only to students in the final year of their degree programme with at least 60 credits in Honours Economics modules.</td>
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<tr>
<td><strong>Planned timetable:</strong></td>
<td>1.00 pm - 2.00 pm Thu (Weeks 1 - 4 only)</td>
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</table>

This module is designed to develop students’ independent research, writing and presentation skills in the application of economic analysis to a selected topic in economics. The project will require initiative, a critical discussion of existing research and development of an argument. The project may also include econometric study of a problem. The permitted length is between 6,000 - 8,000 words.

<table>
<thead>
<tr>
<th>Pre-requisite(s):</th>
<th>Students must be in the final year of their honours programme and have already accumulated at least 60 credits in 3000 or 4000 level economics modules.</th>
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</thead>
<tbody>
<tr>
<td><strong>Anti-requisite(s):</strong></td>
<td>You cannot take this module if you take EC4499</td>
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<thead>
<tr>
<th>Learning and teaching methods of delivery:</th>
<th><strong>Weekly contact:</strong> 1 lecture (x 5 weeks), 1 supervision meeting (x 3 weeks)</th>
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<tbody>
<tr>
<td><strong>Scheduled learning:</strong> 8 hours</td>
<td><strong>Guided independent study:</strong> 192 hours</td>
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<table>
<thead>
<tr>
<th>Assessment pattern:</th>
<th><strong>As defined by QAA:</strong> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%</th>
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<tbody>
<tr>
<td><strong>As used by St Andrews:</strong></td>
<td>Research Project = 80%, Coursework = 20%</td>
</tr>
<tr>
<td><strong>Re-assessment pattern:</strong></td>
<td>3-hour Written Examination = 100%</td>
</tr>
<tr>
<td><strong>Module coordinator:</strong></td>
<td>Dr M P Knowles</td>
</tr>
<tr>
<td><strong>Module teaching staff:</strong></td>
<td>M Knowles</td>
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</table>
## EC4499 Dissertation in Economics

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<th>SCOTCAT Credits:</th>
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<th>Semester: Full Year</th>
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<tr>
<td><strong>Academic year:</strong></td>
<td>2018/9</td>
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<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Available only to students in the second year of any Honours Economics Programmes.</td>
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<tr>
<td><strong>Planned timetable:</strong></td>
<td>11.00 am - 12.00 noon Thu (Weeks 2, 4 and 8 only)</td>
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This module is designed to develop students’ independent research, writing and presentation skills. The dissertation should present original research applying economic and/or econometric methods to a selected topic in economics. The topic should be chosen by students in consultation with their supervisor. Students require approval for their preliminary dissertation outline from both the supervisor and the Principal Module Teacher by the end of the first week of Semester 1. The maximum number of words allowed is 15,000 but students will be advised to cover the topic in around 12,000. The lecture part of the module will train students’ research skills in framing a research hypothesis, conducting bibliographic research, writing a literature survey, structuring a research paper, and presenting research results.

| Pre-requisite(s): | Before taking this module you must pass EC3301 |
| Anti-requisite(s): | You cannot take this module if you take EC4498 |
| Learning and teaching methods of delivery: | Weekly contact: 5 lectures and 6 meetings with supervisor over the year. |
| Assessment pattern: | As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80% |
| Re-assessment pattern: | 3-hour Written Examination = 100% |
| Module coordinator: | Dr M P Knowles |

## EC5201 Macroeconomics

<table>
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<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF Level: SCQF 11</th>
<th>Semester: 2018/9</th>
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<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2018/9</td>
<td></td>
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<tr>
<td><strong>Availability restrictions:</strong></td>
<td>UG - Available only to students in the second year of the Honours programme with the permission of the Director of Teaching who have achieved at least 17.5 in EC3303 or EC3306.</td>
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<tr>
<td><strong>Planned timetable:</strong></td>
<td>To be arranged.</td>
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</table>

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 finite horizon 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. Before commencement of the module, supplementary lectures will be given on the relevant mathematical methods.

| Pre-requisite(s): | Undegraduate students must be in the second year of an honours programme, have scored 17.5 or greater in EC3303 or EC3306 and have the permission of the director of teaching. |
| Learning and teaching methods of delivery: | Weekly contact: 20 hours of lectures over 10 weeks, 1-hour tutorial (x 10 weeks) plus 1 office hour (x 12 weeks). |
| Assessment pattern: | As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40% |
| Re-assessment pattern: | 3-hour Written Examination = 100% |
| Module coordinator: | Dr O Senay |
EC5202 Microeconomics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF Level 11</th>
<th>Semester</th>
<th>1</th>
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</table>

**Academic year:** 2018/9

**Availability restrictions:** UG - Available only to students in the second year of the Honours programme with the permission of the Director of Teaching who have achieved at least 17.5 in EC3302 or EC3305.

**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. Before commencement of the module, supplementary lectures will be given on the relevant mathematical methods.

**Pre-requisite(s):** EC3303 or EC3306 and permission of the director of teaching

**Learning and teaching methods of delivery:**

| Weekly contact: | 20 hours of lectures over 10 weeks, 1-hour tutorial (x 10 weeks) plus 1 office hour (x 12 weeks). |
| Scheduled learning: | 30 hours |
| Guided independent study: | 170 hours |

**Assessment pattern:**

As defined by QAA:

Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%

As used by St Andrews:

3-hour Written Examination = 60%, Coursework (including class test 15%) = 40%

**Re-assessment pattern:**

3-hour Written Examination = 100%

**Module coordinator:** Dr M K Ozbek

**Module teaching staff:** Dr K Ozbek
## EC5203 Econometric Methods and Applications

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
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<th>SCQF Level</th>
<th>11</th>
<th>Semester</th>
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<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2018/9</td>
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<tr>
<td><strong>Availability restrictions:</strong></td>
<td>UG - Available only to students in the second year of the Honours programme with the permission of the Director of Teaching who have achieved at least 17.5 in EC4401.</td>
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<tr>
<td><strong>Planned timetable:</strong></td>
<td>To be arranged.</td>
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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. Before commencement of the module, supplementary lectures will be given on the relevant mathematical and statistical methods.

### Pre-requisite(s):
Undergraduates require EC4401 and the permission of the director of teaching.

### Learning and teaching methods of delivery:
**Weekly contact:** 20 hours of lectures over 10 weeks, 1-hour tutorial (x 8 weeks), 2-hour computing labs (x 2 weeks) plus 1 office hour (x 12 weeks)

| Scheduled learning: | 32 hours | Guided independent study: | 168 hours |

### Assessment pattern:
**As defined by QAA:**
Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%

**As used by St Andrews:**
3-hour Written Examination = 60%, Coursework (including class test 15%) = 40%

### Re-assessment pattern:
3-hour Written Examination = 100%

### Module coordinator:
Dr I Merkurieva