### EC3301 Econometrics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>9.00 am - 11.00 am Tue.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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: Class Test (Theory) = 25%, Class Test (Applied) = 25%. 2 hour Written Examination = 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

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Permission of the Economics Honours Advisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>9.00 am - 11.00 am Mon.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Anti-requisite(s):** You cannot take this module if you take EC3201 or take EC4201

**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 = 80%, Practical Examinations = 0%, Coursework = 20%

As used by St Andrews: Coursework (Quizzes) = 20%, Class Test = 20%, 2-hour Written Examination = 60%

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

**Module coordinator:** Professor A Zapechelnyuk

**Module teaching staff:** Prof A Zapechelnyuk
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 R L Stefanski

Module teaching staff: Dr Radek Stefanski
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 Y Moiseeva

Module teaching staff: Dr Yulia Moiseeva

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: Professor J R McCrorie

Module teaching staff: Prof Roderick McCrorie
EC4402 Economic History

<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>2020-2021</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2.00 pm - 4.00 pm Thu.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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: Coursework = 100%

As used by St Andrews:

Coursework (inc Class Test 50%, Essay 50%) = 100%

Re-assessment pattern: Coursework = 100%

Module coordinator: Dr J R Sousa da Cunha

Module teaching staff: Dr Joao Rafael Cuhna

EC4403 Health and Education

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module explores economic perspectives on health and education. After introducing human capital theory, we will use this lens to examine the decision to invest in schooling and review empirical estimates of the returns to education. We will also consider policy interventions to improve education. In the second part of the course we will study the demand and supply of health services, paying particular attention to the issues surrounding public and private health insurance. We will also discuss public intervention directed at health behaviours. The module will conclude by examining the joint production of health and education, with a focus on early childhood.

Anti-requisite(s): You cannot take this module if you take EC4603

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 15 weeks). |
| Scheduled learning: | 0 hours |
| Guided independent study: | 0 hours |

Assessment pattern:

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

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 A Leighton

Module teaching staff: Dr M Leighton

4
### EC4405 Economics of the Environment

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2.00 pm - 4.00 pm Tue.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

**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 J Y Jin

**Module teaching staff:** Dr Jim Jin

---

### EC4407 Behavioural Economics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

**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 G Gerasimou

**Module teaching staff:** Dr Georgios Gerasimou
### EC4408 Industrial Organisation and Regulations

**SCOTCAT Credits:** 20  
**SCQF level:** 10  
**Semester:** 2  
**Academic year:** 2020-2021  
**Availability restrictions:** Available to General Degree students with the permission of the Honours Adviser  
**Planned timetable:** To be arranged.

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 coordinator:** Dr M M A La Manna  
**Module teaching staff:** Dr Manfredi La Manna

### EC4409 International Macroeconomics

**SCOTCAT Credits:** 20  
**SCQF level:** 10  
**Semester:** 1  
**Academic year:** 2020-2021  
**Availability restrictions:** Available to General Degree students with the permission of the Honours Adviser  
**Planned timetable:** 11.00 am - 1.00 pm Fri.

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.

**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 O Senay
EC4410 International Trade

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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 J Y Jin

Module teaching staff: Dr Jim Jin

EC4413 European Macroeconomics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Anti-requisite(s) Undergraduate - You cannot take this module if you take EC4513 or take EC4613

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).
- **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 M Mitka

Module teaching staff: Dr G Mitka
EC4417 Financial Economics: Asset Pricing

SCOTCAT Credits: 20  SCQF level 10  Semester 1

Academic year: 2020-2021
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.

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 I Psaradellis
Module teaching staff: Dr Ioannis Psaradellis

EC4418 Financial Economics: Corporate Finance

SCOTCAT Credits: 20  SCQF level 10  Semester 1

Academic year: 2020-2021
Availability restrictions: Available to General Degree students with the permission of the Honours Adviser
Planned timetable: To be arranged.

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.

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:
Coursework = 100%

As used by St Andrews:
Coursework (incl. Class Test 25%, Quizzes 25%, Essay 50%) = 100%

Re-assessment pattern:
Coursework = 100%
Module coordinator: Dr V Prasad
Module teaching staff: Dr Vivek Prasad
EC4421 Political Economy

SCOTCAT Credits: 20  SCQF level 10  Semester  2

Academic year:  2020-2021

Availability restrictions:  Available to General Degree students with the permission of the Honours Adviser

Planned timetable:  11.00 am - 1.00 pm Wed.

The main goal of Political Economy is to reach a better understanding of how institutions shape policy outcomes. Standard microeconomic and game theoretical concepts are used to model the behaviour of voters and politicians, and study their interactions under different institutions. The module will cover some of the most important models in this field, providing empirical applications when relevant.

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 13 weeks).

Scheduled learning: 0 hours  Guided independent study: 0 hours

Assessment pattern:  As defined by QAA:

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

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:  Professor C Ponsati Obiols

Module teaching staff:  Prof. Clara Ponsati

EC4424 The Economics of Migration

SCOTCAT Credits: 20  SCQF level 10  Semester  1

Academic year:  2020-2021

Availability restrictions:  Available to General Degree students with the permission of the Honours Adviser

Planned timetable:  To be arranged.

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.

Pre-requisite(s):  Permission of the Economics Honours Adviser

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 Toman 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.

**Pre-requisite(s):** Before taking this module you must pass EC3301 or pass MT3508 or pass EC5203

**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

**Module teaching staff:** Dr Toman Barsbai
## EC4426 Practical Financial Modelling

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Available to General Degree students with the permission of the Honours Adviser</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned timetable:</strong></td>
<td>To be arranged</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Financial modelling using Microsoft Excel is used in many fields such as investment banking, mergers and acquisitions (M and A), equity research, risk analysis, valuations, investment management, credit analysis, financial projections and project evaluations. This module is designed to equip students with skills to implement financial models using Excel. It will also introduce the use of VBA (Visual Basic for Applications, Microsoft's programming language) in financial modelling. This is an applied module with an emphasis on the practical application of finance theory through in-depth Excel based laboratories. Material will be made relevant to the international finance industry with real world examples and problems relevant to global financial markets. The goal of this module is to provide students with extensive knowledge of the quantitative models used by financial institutions around the world.

**Pre-requisite(s):** Before taking this module you must take EC4430 and take EC4417

**Learning and teaching methods of delivery:**
- **Weekly contact:** 1-hour lecture (X 11 weeks), 2-hour practical classes, Excel labs (X 11 weeks)

  | Scheduled learning: 33 hours | Guided independent study: 168 hours |

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

- As used by St Andrews:
  - 100% Coursework

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

**Module coordinator:** Dr M C Iannino

**Module teaching staff:** Dr Maria Chiara Iannino
**EC4430 Portfolio Management**

<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><strong>Academic year:</strong></td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Available to General Degree students with the permission of the Honours Adviser</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned timetable:</strong></td>
<td>TBC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 take 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 R Tuneshev

**Module teaching staff:** Dr Ruslan Tuneshev
### EC4432 Development and Finance

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level: 10</th>
<th>Semester: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</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>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>To be arranged</td>
<td></td>
<td></td>
</tr>
</tbody>
</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>Pre-requisite(s):</th>
<th>Permission of the Economics Honours Adviser</th>
</tr>
</thead>
</table>

**Learning and teaching methods of delivery:**
- Weekly contact: 2 hours of lectures (x11 weeks), 1-hour tutorial (x 5 weeks) and 2 optional office hours dedicated to the module (x 12 weeks)
- Scheduled learning: 27 hours
- Guided independent study: 166 hours

**Assessment pattern:**
- As defined by QAA:
  - Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%
- As used by St Andrews:
  - 2-hour Written Examination = 60%, Coursework (including class test 20%) = 40%

**Re-assessment pattern:**
- 2-hour written examination = 100%

<table>
<thead>
<tr>
<th>Module coordinator:</th>
<th>Dr V Saxena</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module teaching staff:</td>
<td>Dr Vibhor Saxena</td>
</tr>
</tbody>
</table>

### EC4498 Research Project in Economics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level: 10</th>
<th>Semester: Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Available only to students in the final year of their degree programme with at least 60 credits in Honours Economics modules.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>1.00 pm - 2.00 pm Thu (Weeks 1 - 4 only)</td>
<td></td>
<td></td>
</tr>
</tbody>
</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>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-requisite(s)</td>
<td>You cannot take this module if you take EC4499</td>
</tr>
</tbody>
</table>

**Learning and teaching methods of delivery:**
- Weekly contact: 1 lecture (x 5 weeks), 1 supervision meeting (x 3 weeks)
- Scheduled learning: 8 hours
- Guided independent study: 192 hours

**Assessment pattern:**
- As defined by QAA:
  - Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%
- As used by St Andrews: Research Project = 80%, Coursework = 20%

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

<table>
<thead>
<tr>
<th>Module coordinator:</th>
<th>Dr V Prasad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module teaching staff:</td>
<td>Dr Matthew Knowles</td>
</tr>
</tbody>
</table>
EC4499 Dissertation in Economics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>40</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>Full Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Available only to students in the second year of any Honours Economics Programmes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>11.00 am - 12.00 noon Thu (Weeks 2, 4 and 8 only)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. |
| Scheduled learning: | 11 hours |
| Guided independent study: | 389 hours |

Assessment pattern:

As defined by QAA:
Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%

As used by St Andrews:
Dissertation = 80%, Coursework = 20%

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

Module coordinator: Dr V Prasad

Module teaching staff: Dr Matthew Knowles
### EC5201 Macroeconomics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 11</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Undergraduate Students: available with the permission of the Director of Teaching only to students in the second year of the Honours programme who have achieved at least 17.5 in EC3303 or EC3306.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned timetable:</strong></td>
<td>To be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</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):** | Undergraduate - Undergraduate 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). |
| | 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 O Senay |
| **Module teaching staff:** | Dr Ozge Senay |
Economics & Finance - Honours Level - 2020/1 - August - 2020

EC5202 Microeconomics

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 11</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Undergraduate Students: available with the permission of the Director of Teaching only to students in the second year of the Honours programme who have achieved at least 17.5 in EC3302 or EC3305.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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): | Undergraduate - Undergraduate students must be in the second year of an honours programme, have scored 17.5 or greater in EC3302 or EC3305 |
| 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: | Scheduled learning: 30 hours | Guided independent study: 170 hours |
| 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 Kemal Ozbek |
EC5203 Econometric Methods and Applications

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 11</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2020-2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Availability restrictions:</strong></td>
<td>Undergraduate Students: available with the permission of the Director of Teaching only to students in the second year of the Honours programme who have achieved at least 17.5 in EC4401.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned timetable:</strong></td>
<td>To be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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):**
Undergraduate - Undergraduate students must be in the second year of an honours programme, have scored 17.5 or greater in EC4401

**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

**Module teaching staff:**
Dr Irina Merkurieva