<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>1. Course Structure</td>
<td>3</td>
</tr>
<tr>
<td>1.1 Single Honours Economics</td>
<td>3</td>
</tr>
<tr>
<td>1.2 Single Honours Financial Economics</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Single Honours Applied Economics</td>
<td>3</td>
</tr>
<tr>
<td>1.4 Joint Honours</td>
<td>4</td>
</tr>
<tr>
<td>1.5 Honours Degree with a Major in Economics</td>
<td>4</td>
</tr>
<tr>
<td>2. Course Objectives</td>
<td>4</td>
</tr>
<tr>
<td>3. Course Organisation</td>
<td>4</td>
</tr>
<tr>
<td>3.1 Lectures</td>
<td>4</td>
</tr>
<tr>
<td>3.1.1 Core Module Lectures</td>
<td>4</td>
</tr>
<tr>
<td>3.1.2 Option Module Lectures</td>
<td>4</td>
</tr>
<tr>
<td>3.2 Tutorials and Laboratories</td>
<td>5</td>
</tr>
<tr>
<td>3.2.1 Tutorial Sign-up</td>
<td>5</td>
</tr>
<tr>
<td>3.2.2 Attendance</td>
<td>5</td>
</tr>
<tr>
<td>4. Assessment</td>
<td>5</td>
</tr>
<tr>
<td>4.1 Class Tests</td>
<td>5</td>
</tr>
<tr>
<td>4.2 Submitted Continuous Assessment</td>
<td>5</td>
</tr>
<tr>
<td>4.2.1 Submission of Continuous Assessment</td>
<td>6</td>
</tr>
<tr>
<td>4.2.2 Penalties for Late Submission of Work</td>
<td>7</td>
</tr>
<tr>
<td>4.3 Examinations</td>
<td>7</td>
</tr>
<tr>
<td>4.4 Reassessment</td>
<td>7</td>
</tr>
<tr>
<td>4.5 Marking Procedures</td>
<td>7</td>
</tr>
<tr>
<td>4.6 Illegible Examination Scripts</td>
<td>8</td>
</tr>
<tr>
<td>4.7 Marking Scheme</td>
<td>8</td>
</tr>
<tr>
<td>4.7.1 Common Reporting Scale</td>
<td>8</td>
</tr>
<tr>
<td>4.7.2 Reporting codes</td>
<td>9</td>
</tr>
<tr>
<td>4.7.3 Calculation of Module Grades</td>
<td>9</td>
</tr>
<tr>
<td>4.8 S Coding of Module Grades</td>
<td>10</td>
</tr>
<tr>
<td>4.9 Determination of Honours Degree Class</td>
<td>10</td>
</tr>
<tr>
<td>5. Absence</td>
<td>11</td>
</tr>
<tr>
<td>5.1 Absence from compulsory tutorials/laboratories and class tests</td>
<td>11</td>
</tr>
<tr>
<td>5.2 Absence from Examinations</td>
<td>12</td>
</tr>
<tr>
<td>6. Compulsory Module elements/Academic Audit</td>
<td>12</td>
</tr>
<tr>
<td>7. Module Outlines</td>
<td>14</td>
</tr>
<tr>
<td>8. Academic Appeals, Complaints and Disciplinary Issues</td>
<td>42</td>
</tr>
<tr>
<td>8.1 Appeals regarding an academic decision</td>
<td>42</td>
</tr>
<tr>
<td>8.2 Academic Complaints</td>
<td>42</td>
</tr>
<tr>
<td>9. Feedback</td>
<td>43</td>
</tr>
<tr>
<td>9.1 Examination Scripts and Feedback Day</td>
<td>43</td>
</tr>
<tr>
<td>9.2 Examination Scripts – Photocopy</td>
<td>43</td>
</tr>
<tr>
<td>9.3 Essays</td>
<td>43</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>10. Other Information</td>
<td>43</td>
</tr>
<tr>
<td>10.1 Prizes</td>
<td>43</td>
</tr>
<tr>
<td>10.2 Your Personal Tutor</td>
<td>44</td>
</tr>
<tr>
<td>10.3 Deans' List, University Scholarships, Internships and Prizes</td>
<td>44</td>
</tr>
<tr>
<td>10.4 The Staff Student Consultative Committee (SSCC)</td>
<td>44</td>
</tr>
<tr>
<td>10.5 Advising/Re-Advising/Changing or dropping modules...</td>
<td>45</td>
</tr>
<tr>
<td>10.6 Updating personal details/Communicating with the University</td>
<td>45</td>
</tr>
<tr>
<td>10.7 Withdrawal from Studies</td>
<td>45</td>
</tr>
<tr>
<td>10.8 Advice and Support for Students...</td>
<td>45</td>
</tr>
<tr>
<td>10.9 Disability Support</td>
<td>45</td>
</tr>
<tr>
<td>10.10 Personal Circumstances...</td>
<td>46</td>
</tr>
<tr>
<td>10.11 Health and Safety</td>
<td>46</td>
</tr>
<tr>
<td>10.12 IT/Library</td>
<td>46</td>
</tr>
<tr>
<td>10.13 Mathematics Support Centre</td>
<td>46</td>
</tr>
<tr>
<td>10.14 The Careers Centre</td>
<td>46</td>
</tr>
<tr>
<td>10.15 CAPOD</td>
<td>46</td>
</tr>
<tr>
<td>10.16 Orientation Week</td>
<td>47</td>
</tr>
<tr>
<td>10.17 Student Fees</td>
<td>47</td>
</tr>
<tr>
<td>10.18 Degree Regulations</td>
<td>47</td>
</tr>
<tr>
<td>10.19 Questionnaires and Feedback</td>
<td>47</td>
</tr>
<tr>
<td>10.20 Matriculation</td>
<td>47</td>
</tr>
<tr>
<td>10.21 Recording Devices in Lectures...</td>
<td>47</td>
</tr>
<tr>
<td>10.22 Termination of Studies</td>
<td>47</td>
</tr>
<tr>
<td>10.23 Past Exam Papers</td>
<td>48</td>
</tr>
<tr>
<td>11. Timetables</td>
<td>49</td>
</tr>
<tr>
<td>12. Key Dates</td>
<td>51</td>
</tr>
<tr>
<td>13. University Dates</td>
<td>52</td>
</tr>
<tr>
<td>14. Key Contacts</td>
<td>52</td>
</tr>
<tr>
<td>15. Teaching Staff and Research Interests</td>
<td>54</td>
</tr>
</tbody>
</table>

*Statements in this document may be modified or cancelled in the light of University policy, and no responsibility is accepted for the consequences of such changes. Please check online for the most up-to-date version of the Handbook.*
Introduction
Welcome back to the School of Economics & Finance. We hope you enjoy your final year with us. This handbook contains just about all the information you will need regarding the teaching and assessment of Level 4000 (and some Level 3000) economics modules. You should read this document very carefully and if you have any problems, or questions regarding your study of economics, please refer to this handbook in the first instance. Copies of this handbook may be downloaded from the School’s Web-pages at (http://www.st-andrews.ac.uk/economics/undergrad/handbooks.html). Further information regarding undergraduate studies can also be found on the School Webpages (http://www.st-andrews.ac.uk/economics/undergrad/mms.html). Further information on EC3000/4000 level modules can be found via Module Management System (MMS). You can access MMS from the University webpage for current students (http://www.st-andrews.ac.uk/students/), or via the School webpages (http://www.st-andrews.ac.uk/economics/undergrad/mms.html). Further information on the School is available on the School webpages http://www.st-andrews.ac.uk/economics/.

As a student at the University you are expected to be aware of the rules and the procedures that apply to your studies. Information on these are available from a number of sources. A regulatory structure (i.e. a set of rules and regulations), determined by Senate and the Court governs the award of all degrees. These ‘Undergraduate Resolutions and Regulations’ are online at: http://www.st-andrews.ac.uk/students/rules/. The University Student Handbook (http://www.st-andrews.ac.uk/studenthandbook/) includes relevant and important information on a number of issues including: Academic Information, Academic Regulations and Codes of Practice, Employment, Financial Information, Health, Library and Information Services, Student Organisations, Student Services and Student Support and Guidance. The University Web-page for current students also provides important information (http://www.st-andrews.ac.uk/students/).

1. Course Structure
Honours level teaching in all programmes consists of a number of obligatory core modules, and a number of options in which students learn how economic reasoning can be applied in a variety of contexts.

Students must take a total of 120 credits in their Senior Honours year (and to graduate have completed a total of 480 credits including their 1st - 3rd years).

1.1 Single Honours Economics
To obtain a Single Honours Economics Degree a Senior Honours student must take the following:

75 credits of compulsory core modules (EC4201-EC4203) plus
45 credits of other modules chosen from EC4204, EC4300, EC4501-EC4521.

1.2 Single Honours Financial Economics
To obtain a Single Honours Financial Economics Degree a Senior Honours student must take the following:

75 credits of compulsory core modules (EC4201, EC4202, EC4204) plus
45 credits of other modules chosen from EC4203, EC4300, EC4503-EC4521.

1.3 Single Honours Applied Economics
To obtain a Single Honours Applied Economics Degree a Senior Honours student must take the following:

30 credits of compulsory core modules (EC4205) plus
90 credits from other modules chosen from EC4203, EC4302, EC4501-4509, EC4511-EC4521
and from approved modules in Management and International Relations. Students can take a
maximum of 30 IR/Management credits, if available and with the permission of the outside School.

1.4 Joint Honours
In Senior Joint Honours the student will take:

15 credits in the compulsory core module EC3202 plus
45 credits from other modules chosen from EC4201-EC4204, EC4302 and EC4501-EC4521.

You cannot take joint honours degrees in Financial Economics or Applied Economics.

1.5 Honours Degree with a Major in Economics
To obtain a Degree involving a Major in Economics (available to some modern languages students) a student must, over the two years of the Honours programme take:
Core modules: 105 credits, EC3201, EC3202, EC3203 and EC4203
Other modules: 45 credits chosen from EC4201, EC4202, EC4204, EC4300, EC4501-EC4522.

You cannot take a major degree in Financial Economics or Applied Economics.

Please note that in order to gain entry to senior honours you must normally have passed 120 credits in honours modules. This must include EC3201 and EC3203 for joint honours students, and must include EC3201, EC3202 and EC3203 for single honours economics and applied economics students and must include EC3201, EC3202, EC3203, EC4501 and EC4502 for financial economics students. You must also have passed 240 credits at the sub-honours level.

2. Course Objectives
As well as teaching you economics, a major aim of the School and University is to help you grow intellectually. As you study with us you will continue to develop, and improve, a number of a) intellectual skills and attributes and b) transferrable skills. The exact ‘mix’ of these skills and attributes will be dependent upon the module choices you make. A full list of these skills and attributes (by degree), referred to by the University as Programme Outcomes / Graduate Attributes are available at: http://www.st-andrews.ac.uk/progspecs/subject/20SCECFIN/year/2010-1). Some of these attributes are generic, in the sense that they develop as you study and learn, others are more specific to the study of economics.

During Senior Honours you will further develop and build upon the knowledge and abilities assimilated during your junior honours year of study. At the end of your degree in economics you will have a knowledge base that consists of a coherent core of economic principles, relevant quantitative methods and computing techniques, the sources and uses of economic data, and a range of applications of economics.

Module specific learning outcomes are also included in the Module Outlines below.

3. Course Organisation
3.1 Lectures
3.1.1 Core Module Lectures
In core modules, the integrated teaching structure involves both lectures and tutorials. A typical core module has usually 27 hours of lectures and accompanying tutorials. Evaluation usually involves a written examination (70%), continuous assessment (30%) a well as satisfactory tutorial participation.

3.1.2 Option Module Lectures
Option modules, which allow the student to develop his or her own specific interests, are often closely related to the research interests of individual members of staff. Formally they usually
involve 15 hours of lectures, though the teaching is often of an interactive nature. Assessment is by a combination of a formal examination and continuous assessment (usually 60%/40%).

3.2 Tutorials and Laboratories
Tutorials are small discussion groups (typically 8-15 people), while laboratories involve up to 40 students working singly or in groups on a set of technical problems under the supervision of a lecturer, usually for two hours rather than one. Tutorial, laboratory and seminar requirements are described in the individual module outlines below.

3.2.1 Tutorial Sign-up
During week 1 of each semester it is your responsibility to sign up for a tutorial group electronically via the Module Management System (MMS). Think carefully before selecting a time slot as it is not always easy to amend this if you change your mind or discover a clash with another class. You will not be able to change tutorial slot after the end of Week 2. There are a limited number of places at each tutorial, once the list of names for a particular time slot is filled, you will need to choose an alternative group. Tutorial places are allocated on a first come first served basis. If you have difficulty finding a tutorial slot you are able to attend please go and see the School Administrator. Please take a note of the group you sign up for as this information is not available from MMS once you have signed up.

3.2.2 Attendance
Attendance at tutorials / labs is COMPULSORY and you must attend the tutorial / lab you have signed up for. You are expected to come to your tutorials prepared (for more information see the relevant Module Outlines in Section 7 below). At your first tutorial you will be given an Attendance Sheet, on which there are spaces for your tutor to register you. It is your responsibility to obtain from your tutor, at the end of each tutorial, a signature (or personal initials) to confirm your attendance.

The Attendance Sheets must be submitted in the Honours Level box in the foyer of the School of Economics & Finance by noon Friday 5th December 2014 (for first semester) and by noon on Friday 1st May 2015 (for second semester).

4. Assessment
A range of assessment modes is used at the Honours level designed to test the set of learning outcomes. These include: class tests, essays, reports, presentations, posters and examinations. Please make sure you are fully aware of the Good Academic Practice Policy (see Section 10)

4.1 Class Tests
All tests are all closed book (unless you are otherwise informed by your lecturer). They are typically held during the class hour, though accommodation difficulties on occasion might necessitate the choice of another time. The syllabus for each test is detailed in the module outlines in Section 7 below.

Please note that University examination rules also apply to student conduct during class tests.

Please see Section 5 for information on absence from a class test.

4.2 Submitted Continuous Assessment
Essays must be single-authored and submitted electronically. The word limit is usually 1,500 words. Other assignments may have different requirements. Continuous Assessment should normally be marked and returned 3 weeks after the submission date. There is information and advice on essay writing available on the School webpage (http://www.st-andrews.ac.uk/economics/pdf/essaywriting.pdf). Read Section 7 for further information regarding the continuous assessment you are required to submit.
4.2.1 Submission of continuous assessment

Submission

You are required to word process your essays and other assignments and to submit them electronically via MMS (unless explicitly told otherwise by your module lecturer). If your assignment is submitted after the published submission date you will be penalized (see below). YOU MUST SUBMIT YOUR ASSIGNMENT IN PDF FORMAT. Most University computers can convert a word processed document to pdf (and programmes are easily available on the internet). If you submit your assignment in another format or submit in another way (e.g. as an e-mail attachment) it will not be acknowledged as being submitted and you will incur late submission penalties.

Under no circumstances will work be allowed to be submitted more than two weeks after the published submission date. Extensions should be asked for in writing (e-mail) to the School Administrator, and not a module lecturer / tutor. Extensions are only granted for good reason (see section 6.1). Note that extensions are never granted for such things as last minute computer breakdown or disk corruption. Please make regular back-up copies of your computer files and keep these in a safe place. Please also note extensions are not granted for minor medical ailments, such as colds or flu. If you hand in your assignment after the deadline, this is viewed by the University as a form of absence, and you must fill out a Self-certification of Absence (available at https://e-vision.st-andrews.ac.uk/urd/sits.urd/run/siw_lgn). See section 5 for further information on absence.

It is also your responsibility to check you upload the correct assignment, the School will not check this for you. Students who realise they have submitted the wrong assignment (e.g. one for another module) and then submit the correct one after the submission date, will be penalised for late submission. If the error is not noticed (until after the assignment is returned), your assignment mark will be that given by the marker (which may be zero). You only be able to submit the correct assignment up to two weeks after the submission original date.

University Policy on Language Correction/Proof Reading

Within the School of Economics and Finance, students may obtain assistance from another person, whether paid for or not, for the correction of the written language of their formative and summative assessments, as long as this is explicitly acknowledged (note the rules on language correction / proof reading differ between Schools).

If you have had your assignment proof read and corrected for language you should also include the follow statement at the beginning:

“I, [INSERT MATRICULATION NUMBER], received particular assistance in the writing of this work in respect of matters of grammar, style, vocabulary, spelling or punctuation. The assistance was provided by (delete as appropriate):

A member of the Academic Staff
A non-academic member of Staff
A fellow Student
Other Source (please specify)”

Word Limits

It is important you stick to the specified word limit for any piece of submitted continuous assessment. Students who do submit work where they have not respected a word limit will be penalized according to University Policy. Written work, exceeding published word limits, will be penalized by one mark on the 20-point scale if it is 10% over the word limit, and then a further one mark per-additional 10% over the word limit. Word limits include appendices, headings/sub-headings, footnotes, endnotes and text/ notes on figures/diagrams/tables etc., but exclude bibliography, figures/diagrams/tables (excluding text), equations, and the question title if you have included that at the start of your submitted work.
Continuous Assessment Submission Dates

Students are strongly encouraged to familiarise themselves with continuous assessment submission dates and the timing of class tests. While the School does try to space out these dates, there will inevitably be periods of time where you have a large workload. It is advisable to always plan your work well in advance, and to also incorporate a contingency of 24 hours to allow for last minute problems.

4.2.2 Penalties for Late Submission of Work

Penalties for late submission of work due as part of continuous assessment are determined by University Policy and are as follows: work will be penalized by one mark on the 20-point scale for each day (or part thereof) that it is submitted late. Please note that every day of the week will be considered as counting towards a late penalty. This rule applies to all holidays (public and University) and includes weekends (with Saturday and Sunday each counting as one day). If your essay IS NOT SUBMITTED WITHIN 2 WEEKS of the due date, you will be awarded NO credit for the module. See section 5 below for more detail.

4.3 Examinations

Examinations are held as described in the Module Outlines (section 7).

When returning to St Andrews for an examination, you should ensure that you schedule your travel arrangements so as to arrive in good time. Poor scheduling on a student's part is not accepted as a valid excuse for missing an examination.

Full information on all aspects of the exams process, including timetables is available at (https://www.st-andrews.ac.uk/students/academic/examinations/).

4.4 Reassessment and deferred examinations (August)

A student who fails the assessment of an Honours module, with a grade of between 4.0 and 6.9, will be reassessed by EXAM. This cannot happen if you have a 0X for a module (see section 7). You also CANNOT be reassessed if you fail a module with a grade of less than 4.0. If either of these two outcomes apply to a core module (see Section 2) it may mean you cannot successfully complete your degree. If you fail an honours module make an appointment to see the Director of Teaching as a matter of urgency.

Under exceptional circumstances (e.g. you were seriously ill on the day of your exam during the December or May diet of examinations) you may be allowed a deferred assessment at the August (Reassessment) diet. Please note that you CANNOT elect to take a deferred exam at a time other than this. Please see section 5 and (https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/deferrals.pdf) for further information on deferred examinations.

Note to be eligible to take a re-assessment or deferred examination you must register (normally from July 1st) with the University Examinations Office.

If you are taking a re-assessment exam or a deferred exam, information (including timetables and how to register for a re-assessment exam) will appear at https://www.st-andrews.ac.uk/students/academic/examinations/.

Students who are out of time or whose studies have been terminated but who have been given permission by the University to sit only the examination in a particular semester must also register individually for the diet in question and pay the appropriate fee.

If you are absent from an exam or reassessment (or if you have not complied with arrangements regarding reassessment) please read Sections 5 and 6 below.

4.5 Marking Procedures

All tests and essays are marked by the lecturer(s) or tutor(s) of the relevant module. The School anonymously marks continuous assessment where practicable. All submitted
continuous assessment and (non-multiple choice) class tests will be anonymously marked. Multiple choice class tests and presentations will not be anonymously marked.

All examinations are marked by two different examiners who then agree a single mark, without knowledge of the identity of the student concerned; they are then subject to the scrutiny of the external examiners.

The examination script books are designed so that all your personal details are completed along a strip on the right hand side of the script book, which you seal before leaving the Examination Hall. You should ensure your matriculation number is completed on the front of the script book and that it remains clearly visible. Your personal information will remain sealed while the marker(s) mark your script. Once a mark as been agreed by the markers and recorded on the front of your script book, the flap will be opened to reveal your personal details to ensure that the information is recorded on the correct student record.

4.6 Illegible Exam Scripts

It is your responsibility to ensure that your handwritten answers provided in examination scripts are legible and can be read by the markers. If a script cannot be read by the marker then this could result in a delay in confirming your module grade. You may be charged for a transcription service and could be required to return to the School(s) concerned in order to transcribe the script. If you have already left St Andrews then you will have to bear the costs of any return travel to the University. More information is available at: https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/illegible-scripts.pdf

4.7 Marking Scheme

4.7.1 Common Reporting Scale

The University uses a 20-point Common Reporting Scale for grades (ie a 20 point basic scale reported to one decimal point for the reporting of final module grades). The use of the Common Reporting Scale across all Schools ensures comparability of grading across disciplines. Details of the Common Reporting Scale can be found at: https://www.st-andrews.ac.uk/staff/teaching/examinations/scale/

In economics, the mark you get for a written piece of work, suggests a standard of work as follows:

17-20

The work demonstrates a thorough understanding of all (or nearly all) relevant material. It is very likely to demonstrate a strong ability to evaluate/manipulate, where relevant, appropriate models, hypotheses, theories, methods and/or evidence at an appropriate level of detail and/or rigour. The work is very likely to present a fully connected, clear and coherent argument, with no substantive errors of fact and very little or no irrelevant information. The material presented is likely to go beyond what was explicitly taught in the course, may demonstrate some engagement with current research, and is likely to include material from other sources (e.g. independent reading). There is likely to be some evidence of originality and independence of thought.

14-16

The work is likely to demonstrate a good understanding of the central relevant material. It is also likely to demonstrate a good ability to evaluate where relevant, appropriate models, hypotheses, theories, methods and/or evidence at an appropriate level of detail and rigour. A connected, clear and coherent argument is likely to be present in most or all of the text. Material presented may show some evidence of independent reading. It is less likely there will be evidence of originality or independence of thought. It is likely material will be derived directly from content of the course, but this will be fully and accurately reported with little irrelevant material included and few (if any) errors.

11-13

The work is likely to present relevant information (probably solely from the course). It is likely to demonstrate some ability to evaluate appropriate hypotheses, models theories, methods
and/or evidence, but this likely to be insufficiently detailed and/or rigorous. There are likely to be some omissions, occasional errors, and some irrelevancies. Understanding of relevant issues may be incomplete and arguments may lack some coherence/clarity and may be disconnected.

7-10
The work is likely to present some relevant information. It may make some attempt to evaluate appropriate hypotheses, models theories, methods and/or evidence, but this is very likely to lack sufficient detail and/or rigour. The material is likely to contain serious errors and/or significant omissions and may include a good deal of irrelevant material. Understanding of relevant issues is likely to be incomplete, and arguments are likely to be disconnected and to lack coherence and/or clarity.

4-6
There is likely to be some limited ability in routine work and some relevant information will be present, although there will be an insecure grasp of basic concepts. It is unlikely that any significant attempt will be made to evaluate appropriate hypotheses, models theories, methods and/or evidence. Arguments are likely to be unclear, disconnected and lack coherence. There is likely to be an unsatisfactory depth of knowledge and answers may include substantial amounts of irrelevant material.

0-3
The work fails to evince an understanding of the basic issues at stake. It is likely to present very little (or no) relevant information and/or commits major and multiple errors.

4.7.2 Reporting codes
The key module results reporting codes that you may see on your record card are:

0X Student has failed to complete the work of a module without good reason. Student did not register for, or did not attend, an examination without good reason. The student is not entitled to a re-assessment opportunity for the module.

0D Deferred assessment

0Z Result undecided: the result may be unresolved due to mitigating circumstances, or for some other valid reason. This is a temporary code and will be changed to one of the other definitive codes on the list as soon as the matter is resolved.

0 – 3.9F Fail with no right to reassessment
4.0 – 6.9F Fail with right to reassessment
7.0 – 20.0P Pass
S Indication against honours or taught postgraduate modules (excluding masters projects or dissertations) to indicate that special circumstances have affected the module. Modules with this code will be discounted from the algorithm used to determine a final Honours Classification
M Decanal intervention.

4.7.3 Calculation of Module Grades
In the School of Economics & Finance, your reported overall module grade is a weighted average of continuous assessment and examination marks to one decimal point.

In the School of Economics & Finance, your reported overall module grade is a weighted average of continuous assessment and examination marks to one decimal point.

Examinations and Continuous Assessments in the School of Economics & Finance are marked on the 20 Point Scale or on another scale (such as a percentage scale) and converted to the University 20 point scale. When work is returned to you the mark obtained on the 20 Point Scale will be clearly shown.

It is important to realise that – in accordance with normal educational practice – there is NO fixed conversion between the University 20 point scale and other marking scales that may be
used. You may find different conversions (as appropriate to the task set) between assessments within the School, between modules that you take in different Schools, or between modules that you take at St Andrews and any that you take with credit-transfer at other Institutions.

The conversion commonly used within the School between the percentage scale and the 20 point scale is available on the School website. If a different scale is used, that will be made available to you.

Please note that all exam and continuous assessment marks are technically provisional until agreed by external examiners and the School Examinations Board.

For further information from the University see https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/grades-definition.pdf

4.8 S Coding of Module Grades

“S” Coding is the method the University uses to recognise that exceptional special circumstances have affected performance in the modules concerned. ‘S’ coding may be applied to honours or taught postgraduate modules, except for taught postgraduate project or dissertation modules which are excluded. ‘S’ coding may only be applied with the explicit consent of the student and with the approval of the School. The final decision to ‘S’ code a module grade rests with the School. You should be aware that a maximum of 25% of all overall Honours credits required or 50% of the taught element of a postgraduate award may be ‘S’ coded.

If you feel that most or all of the work of a module has been adversely affected by personal circumstances during your final junior and senior honours years or during the taught modules of a taught postgraduate programme you should contact your School in the first instance indicating the circumstances of the difficulty experienced. This may relate to ongoing illness, close family bereavement or other significant personal difficulties.

You must bring this information to the attention of the School as soon as is possible as there are a number of ways to deal with such situations, ‘S’ coding being the final option. It may be possible (and it is viewed preferable) to arrange deferred assessments or extended submission dates rather than applying ‘S’ to the entire module. However it should be noted that if such arrangements are made (extensions of deferred assessments, etc.) it is unlikely you will also be entitled to have the module ‘S’ coded as well.

Please note, the School and the University expect to be informed about significant special circumstances as they occur. If you seek an ‘S’ coding retrospectively, the School (and the University) will expect you to provide a very good reason as to why the special circumstances were not previously brought to our attention.

For further information see http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/s-coding.pdf.

4.9 Determination of Honours Degree Class

The University applies a common formula for the calculation of the award of Honours classifications. Degrees are classified using a credit-weighted calculation of grades achieved for Honours-level modules (3000 level and above) taken during an approved honours programme. This ensures consistency, particularly if you are taking a joint degree. Full details of the University’s Honours Classification algorithm can be found at: http://www.st-andrews.ac.uk/staff/teaching/examinations/honours/
5. Absence

5.1 Absence from compulsory tutorials/laboratories and class tests

Attendance is a basic assessment requirement for credit award. You must attend the compulsory elements of a module. At the honours level, your tutorials, laboratories and presentations are normally compulsory and failure to attend them may result in your losing the right to take the examination in a module. This means you would get no credit for it. Please make sure you are familiar with the University’s Academic Alert Policy (see section 6 below).

If you have missed timetabled compulsory tutorials / labs (or a class test) due to unavoidable special circumstances such as an illness or an unavoidable pre-arranged event or appointment, you must complete a Self Certificate of Absence form (through e-Vision) as soon as possible. This is available at https://e-vision.st-andrews.ac.uk/urd/sits.urd/run/siw_lgn

Absence from a class test should also be reported immediately to the School Administrator. Please see section 6 if you have missed a class test.

Under certain circumstances, the School may request further documentation in addition to the Self Certificate. In this case, students should contact Student Services in order to organise the appropriate documentation.

If you submit more than three Self Certificates in a single semester, or if the period of absence extends to fifteen working days (i.e. three weeks), you may be contacted by Student Services, the relevant Pro Dean, or by an appropriate member of staff from the School.

Failure to report your absences correctly or absences that extend to a period of three weeks or more may mean you get no credit for a module (see section 6 below). If you wish to be away from the University for three weeks or more you MUST get the permission of the Pro-Dean of your Faculty. Before making any commitment to undertake any activity that will take you away from the University, and may impact upon your studies (e.g. an internship) please discuss with the Director of Teaching.

If you are a full-time student the University expects you to fit the rest of your life around your studies (and not the other way round)! Therefore, you should only be absent from an exam or from your assigned tutorial or from a class test for a good reason. Good reason means significant, unexpected and unavoidable special circumstances, such as an illness or a family bereavement. This does not include pre-booked holidays, attending family celebrations, working on a piece of continuous assessment, business commitments, etc.

**Academic Flexibility for Students with Recognised Sporting Talent:** There is a policy which allows eligible students (with the permission of the School and Sports Performance Manager) to have time off from their studies in order to participate in key sporting tournaments and competitions. Further information is available from Debby Sargent, Department of Sport and Exercise (email dls4) or see https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/sports-flexibility.pdf

Please note students are also expected to attend their assigned tutorial group / lab. If you wish to change your assigned group you can only do so with the permission of the Director of Teaching. You may, on a one-off basis, attend a tutorial/lab other than your assigned group, but only for a good reason (such as a job interview) and only with the permission of the Director of Teaching. Students who otherwise attend tutorials/labs other than their assigned group may find themselves being recorded as not attending and may end up with no credit in the module.

If you know in advance you are going to be absent from an assigned tutorial/lab for good reason, please notify the School Administrator as soon as possible and, in any event, in
advance of the absence. If possible you should, with the permission of the Director of Teaching, attend another group.

Please note the completion of a Self-Certificate for Absence form does not automatically mean the School (or University) accepts an absence is for a good reason. The School in most circumstances will require additional relevant evidence of the reason for your absence.

If you are an international student (non-EEA nationals only), you will be affected by recent changes introduced by the UK in relation to immigration rules and visas. The University is now legally bound to report to the United Kingdom Borders Agency any student who fails to enrol on a module or programme of study or who fails to attend or who discontinues their studies.

5.2 Absence from Examinations
Absence from Examinations due to significant, unexpected and unavoidable special circumstances (see 5.1 above) should be reported IMMEDIATELY you know you will be unable to sit an examination to the Examinations Office by telephone (01334 464100) This should then be followed up by an appropriate Self-Certification of Absence form (via e-vision) as soon as you are in a position to access a computer. Please also inform the School Administrator (01334 462398).

The Contact for the Examinations Office is:
Warwick Danks, Examinations Officer
The Old Burgh School, Abbey Walk
Telephone: 01334 464100
Email: examoff@st-andrews.ac.uk

As soon as you are well enough you should contact the School Administrator. This will allow the School to arrange a deferred examination. If you are unable to take a scheduled examination because of special circumstances, the School may ask you to sit a DEFERRED examination. Please read the University Policy on Deferred Assessment very carefully.

Absence from an examination without a good reason (see 5.1) will result in you getting no credit for the module (you get a 0X) and will also mean you are not eligible for re-assessment in the module (see section 6).

Please note the completion of a Self-Certificate for Absence form does not automatically mean the School (or University) accepts an absence is for a good reason. The School in most circumstances will require additional relevant evidence of the reason for your absence.

For more on Absence Policy see the University Student Handbook (http://www.st-andrews.ac.uk/students/rules/selfcertification/)

6. Compulsory Module elements/Academic Alert
Academic Alerts are a way of helping students who are having trouble coping with their studies; such as missing deadlines for handing in work, or missing compulsory tutorials. The aim of the Alert system is to help students by flagging up problems before they seriously affect students’ grades. Academic Alerts will be issued by email from the Director of Teaching, Director of Postgraduate Studies, Module Coordinator or School administrator and will tell students what is wrong and what they are required to do (e.g. attend classes in future). The Alerts will also tell students what support the University can offer. If students do not take the action required they will get another Alert, and eventually will automatically get a grade of zero and will fail that module. The system is designed to help and support students in order to remedy any problems or issues before these lead to failing a module. Alerts will never appear on a student’s permanent transcript. For more information on Academic Alerts and details on how the categories work, see http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/academic_alerts.pdf.
In the School of Economics and Finance, at the Honours level, we expect the following from you:

a) Where a module has labs / tutorials you must attend at least 70% (to the nearest, upwardly rounded whole number) of these classes. See Section 7 below for attendance requirements for each module).

If you attend fewer tutorials / labs than outlined above (and your absences are NOT for good reason – see section 5.1) you will not have your module exam paper marked and you will get no credit for the module (a ‘0X’ appears on your student record).

b) Some modules include class tests. We expect you to sit ALL class tests – they are compulsory.

If you are absent from a class test without good reason (see section 6.1) you will normally be given a grade of 0X for the module (this means you get no credit for it).

If you are absent from your class test for good reason, you will be required to take a deferred class test towards the end of that semester’s examination diet. If you do not take the deferred class test you will normally get 0X for the module. Please read the University Policy on Deferred Assessment very carefully.

c) In most Honours modules you must also submit at least one essay. If you fail to submit your essay (without good reason – see Section 5.1) within 10 days of the due date, you will not have your exam paper marked, and a ‘0X’ will appear on your student record.

d) In some honours modules, a presentation forms part of the continuous assessment (e.g. EC4300, EC4302). Presentations in these modules are compulsory. If you fail to give a presentation at scheduled time (without good reason – see Section 5.1) you will also get a 0X for the module.

Unless a module has no examination, if you are eligible to sit the examination in an honours level module, but do not turn up (and who have no good reason for your absence) you will also awarded a ‘0X’.

If you register for a module but then do not attend it will also result in no credit for that module, and a grade of ‘0X’ on your record, with no possibility of re-assessment. You may also find problems with your examination schedule.

If you are informed by the School you are to be awarded a ‘0X’ for a module because of absences or for not completing work, but feel there have been good reasons for your actions (as outlined in section 5.1), and that you would like to challenge the School’s decision, please get in touch with the Director of Teaching (pdm1).
7. Module Outlines

<table>
<thead>
<tr>
<th>EC4201 Economic Analysis</th>
<th>Martinmas Semester 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LECTURERS:</strong></td>
<td><strong>CREDITS:</strong> 30</td>
</tr>
<tr>
<td>Dr Ozge Senay (Principal Module Teacher) Dr Kemal Ozbek</td>
<td></td>
</tr>
<tr>
<td><strong>LECTURES:</strong></td>
<td><strong>TUTORIALS:</strong> 8 x 1 hour tutorials in weeks 2, 3, 4, 5, 6, 7, 8 ad 9. Tutorials will involve working problems or exercises assigned the week before.</td>
</tr>
<tr>
<td>25 lectures, beginning in Week 1. 3 lectures per week on Mondays, Tuesdays and Wednesdays at 10 am in School II.</td>
<td></td>
</tr>
<tr>
<td><strong>EXAMINATION:</strong></td>
<td><strong>CONTINUOUS ASSESSMENT:</strong></td>
</tr>
<tr>
<td>1 three hour exam, with two sections: Section A (50%) Micro maths and formal development + essay Section B (50%) Macro maths and formal development + essay</td>
<td>Class test 1 on Wed 22nd October Class test 2 on Mon 10th November</td>
</tr>
<tr>
<td><strong>FINAL GRADE:</strong></td>
<td><strong>SUPPLEMENTARY INFORMATION:</strong></td>
</tr>
<tr>
<td>Examination, 70% weight 2 Class tests, 15% weight on each</td>
<td>The class test has a quantitative element</td>
</tr>
<tr>
<td><strong>PREREQUISITE:</strong></td>
<td>** REQUIREMENTS:**</td>
</tr>
<tr>
<td>Available only to students in second year of Honours programme</td>
<td>Participation in at least 6 tutorials</td>
</tr>
</tbody>
</table>

Introduction

The module is designed to provide an advanced understanding of current economic theory and applications, covering both microeconomics and macroeconomics. The macroeconomic content of the module is delivered by Dr Ozge Senay; the microeconomic content by Dr Kemal Ozbek.

The Macroeconomics part of the module has three main components. The first group of lectures focuses on analysing the main features of three general models of growth theory, namely the Solow model, the Ramsey model and endogenous growth models, the main focus of interest of the second group of lectures is advanced real business cycle theory and its applications. The final group of lectures aims to introduce the main framework of modern macroeconomic analysis, namely dynamic stochastic general equilibrium models, and to relate its applications to recent economic crises.

The Microeconomics component looks at Microeconomics through the lens of game theory. It develops economic, political and other applications using the tools of advanced game theory (including mixed-strategy Nash equilibrium, sub-game perfection, repeated games, Bayesian Nash equilibrium, dynamic games of imperfect information). There is heavy emphasis on rigorous and formal reasoning and deduction, although no advanced mathematical tool is used.

Learning Outcomes

By the end of the macroeconomic component of this module, students should know and understand the following:

- the main features of key growth models
- the main features of real business cycle theory and methodology
- the theoretical and empirical underpinnings of real business cycle models and their extensions
- modern macroeconomic analysis using dynamic stochastic general equilibrium models and their applications to recent economic crises
A student who has taken the microeconomic component of this module should be able to:

- understand the techniques, methods and concepts of advanced game theory;
- find the solution of a given game theoretic model;
- construct new game theoretic models, in a creative way, to formalize given economic, political, or generically strategic problems;
- more generally, reason formally about microeconomic problems;

**Course Outline**

*Macro-Economics*

Time permitting, the topics to be covered in this part of the course are:

1. Growth theory and analysis of key growth models (the Solow model, the Ramsey model and endogenous growth models)
2. Empirical evidence on growth models
3. Real business cycle (RBC) theory and the empirical performance of RBC models
4. Extensions to the basic RBC model and recent developments in RBC modelling
5. Framework of modern macroeconomic analysis: Dynamic stochastic general equilibrium models and their applications to recent economic crises

*Micro-Economics*

Time permitting, the topics to be covered in this part of the course are:

1. Basic elements of noncooperative games
2. Simultaneous-move games
3. Dynamic games
4. Market power
5. Cooperative games
6. Market design
### Introduction
The module seeks to equip students with advanced skills in data analysis using both time series and cross section econometric techniques. These skills include the ability to explain and interpret panel estimation, simultaneous equation models, limited dependent variable models and the properties of time series data. The module builds upon the knowledge of the classical linear regression model acquired in EC3202.

### Learning Outcomes
By the end of the module, students should:
1. Know how to specify and estimate panel data models with fixed effects
2. Understand differences in differences estimation
3. Know the linear probability model and its problems and the logit, probit and tobit models
4. Understand the nature of simultaneous equation models and their properties
5. Know how to determine whether an equation is identified
6. Understand estimation by two stage least squares and instrumental variables
7. Know the distinction between stationary and nonstationary variables
8. Understand how to test for unit roots and cointegration
9. Know error correction models and their relationship to cointegration
10. Understand simple forecasting methods

### Course Outline
1. Regression with Panel Data
2. Regression with a Binary Dependent Variable
3. Instrumental Variables Regression
4. Regression Analysis of Economic Time Series Data
Introduction
The module is designed to show students how to employ economic analysis to understand a range of contemporary economic policy issues. It will cover a range of topics:

1. “Regulation of Financial Institutions” (Dr Geetha Selvaretnam)
2. “Tackling Corporate Crime” (Professor David Ulph)
3. “Contemporary health policies” (Dr Luca Savorelli)
4. “Debate on Basic Income” (Dr Jim Jin)
5. "Austerity, Growth and Debt: problems in the European Union" (Professor Andrew Hughes-Hallett)

Learning Outcomes
You will:
- become familiar with issues, arguments and evidence on a range of policy issues,
- gain experience in analysing, criticising and evaluating literature, gain experience in identifying new and contemporary issues that are researched and how they are analysed.
**Introduction**

This module follows EC4501 and EC4502 and completes the Honours degree in Financial Economics. EC4204 includes an introduction to the theoretical development of asset pricing models and extensive coverage of the theoretical foundations of option pricing. Whereas in EC4501 and EC4502 the student solved small binomial option pricing problems, in EC4204 the foundations of the binomial approach and its extensions to multinomial option pricing and, ultimately, the derivation of the Black-Scholes formula are studied. EC4501 and EC4502 emphasised the solution of small case-study like financial problems via the application of the standard CAPM pricing model. In EC4204 we derive the CAPM model from its foundations and study its theory in detail. The theoretical and empirical implications of the CAPM and other pricing models for evaluating portfolio performance are also studied in depth.

**Learning Outcomes**

- Returning to the economic foundations of the concepts of return and risk, we will formally derive the basic elements of portfolio theory.
- You will see how portfolio theory can lead to variations of the standard valuation model for investments – the CAPM.
- You will learn how to derive alternative asset pricing models to the CAPM, and how the latter differs from them in its theoretical assumptions and predictions.
- We will overview some recent theoretical challenges to standard asset pricing models that derive from relaxing the standard assumptions about market efficiency.
- You will see how separate is the theory of option pricing from standard risk-return pricing models, and how different are the theoretical foundations of option pricing. We will formalise the so-called “no-arbitrage” condition and show how it constitutes the basic theoretical foundation of all option pricing models.
- You will learn how to use the “no-arbitrage” condition to develop richer and more detailed option pricing models.
- You will learn how a number of the basic theoretical concepts that will be covered in this course can be implemented in computer spreadsheet models.
Course Outline

- Investment in Inefficient Markets
- Risk neutrality and risk aversion
- Probability distributions of returns
- Combination lines and efficient sets
- Methods for finding efficient sets
- Generalised factor models for return and risk
- The CAPM and the alternative pricing models
- Empirical validation of the CAPM
- Arbitrage Pricing Theory
- European option pricing
- American option pricing
- Further issues in option pricing
- Financial forwards futures and hedging

Textbooks

The textbooks for this module are:


EC4205 Economic Policy

LECTURER:
Dr Luca Savorelli (Principal Module Teacher)
Dr Margherita Negri
Dr Shoujian Zhang

CREDITS: 30

LECTURES:
9 two-hour lectures, 1 lecture per week,
Tuesday 4 - 6 pm in F2.

TUTORIALS:
Five seminars on: Thurs 18th Sept;
Thurs 2nd Oct; Thurs 16th Oct;
Thurs 23rd Oct and Thurs 6th Nov.
9 – 10 am in the econometrics lab

EXAMINATION:
One three-hour paper
Structure: Answer three questions from four questions

CONTINUOUS ASSESSMENT:
One essay and one project presentation.

Essay (1,500 words) to be submitted by noon on Wednesday 5th November.
Presentation:
Project proposal to be submitted by 12 noon on Tuesday 30th September.
Slides to be submitted by noon on Monday 24th November.
Presentation on Wednesday 26th November in the econometrics lab.

FINAL GRADE:
Continuous Assessment: 40%
Examination: 60%

PREREQUISITE:
Admission to Senior Honours Applied Economics

ANTIREQUISITE:
EC4510

Introduction
The aim of the module is to introduce you to and get you to think about a range of issues in contemporary economic policy. While those issues studied will be based largely on current discussion in the UK, there will be a number of issues that inevitably have a more international focus and in these cases we shall explore the nature of the debate in different countries.

Learning Outcomes
- To appreciate and understand a range of contemporary policy issues, both national and international.
- To appreciate and understand the role of economic analysis in the design and implementation of policy.
- To appreciate and understand the role of evidence in the design and implementation of policy.
- To be able to debate and discuss policy issues.

Course Outline
The module has two components: a lecture component (shared with EC4510) and a project with an assessed (15-minute) presentation. The project will be on a topic that is distinct from those as covered in the lectures. Students will have to submit their presentation proposal by 12 noon on Tuesday 30th September. The final topic of the presentation will be agreed with
the module teacher by week 6 of the semester. The presentations will take place on Wednesday 26th November at a time to be agreed.

Lectures
We will look at specific topical policy issues and will use economic tools to analyse these. Because the policy agenda is continually changing, the actual topics covered vary from year to year but examples are health policies, educational policies, unemployment benefits, immigration, employment protection, etc.
**EC4300 Dissertation** | Two Semesters (a one year module)
---|---
**LECTURERS:**<br>All members of staff | **CREDITS:** 30
**LECTURES:**<br>None | **CONTINUOUS ASSESSMENT:** 1 hour laboratory (on presentation preparation): tba<br>Participation in School Colloquia on 23rd April 2015
**EXAMINATION:**<br>None | **ASSESSMENT:** Dissertation to be submitted by noon on Thursday 9th April; Presentation of the dissertation on 23rd April 2015 (depending upon student numbers and group size)
**FINAL GRADE:**<br>Dissertation: 85% weight<br>Presentation: 15% weight | **SUPPLEMENTARY INFORMATION:** The outline of your dissertation must be approved by your supervisor and by the Director of Teaching by the end of the third week of Martinmas semester.
**PREREQUISITES:**<br>Admission to Senior Single Honours Economics or Single Honours Financial Economics | **REQUIREMENTS:** Participation in Laboratory and Colloquia

### Introduction
This module is designed to develop students’ independent research, writing and presentation skills and to enable them to apply economic and/or statistical and econometric analysis to a selected topic in economics. The dissertation must be on a topic in economics and a preliminary outline of it should have been approved within the first two weeks of Martinmas semester by the Director of Teaching and by the proposed dissertation supervisor. The maximum number of words allowed is 15,000 for the EC4300 dissertation but students will be advised to cover the topic in around 10,000 words for EC4300.

### Learning Outcomes
You will:
- master a body of literature dealing with a particular area of economics
- learn how to conduct bibliographic research
- gain experience in applied economic research and/or applied econometric research, and in particular in conducting and writing a sustained research project.

### Why do a Dissertation?
The School wishes to encourage students to think of taking this module, which it regards as valuable and stimulating. It provides the opportunity for students to develop their skills in research, writing and presentation, and to focus a larger than usual share of their energies on a single topic which they have chosen themselves. You will spread your efforts over two semesters. The dissertation which is produced can also be shown to potential employers or postgraduate admission officers as evidence of a student’s ability to work on her or his own to a high standard.

### Ethics Committee
Students whose dissertation involves human subjects (e.g. interviews or experiments) must complete an Ethical Application Form. This should be endorsed by your supervisor and submitted to the Chair of the School Ethics Committee, for approval before proceeding with the work. If you think you may need to fill out an Ethical Application Form you should discuss the issue with your dissertation supervisor. Application forms can be found at: [http://www.st-andrews.ac.uk/utrec/forms/](http://www.st-andrews.ac.uk/utrec/forms/)
EC4302
Research Project

RESEARCH PROJECT
Candlemas Semester 2015

LECTURERS:
All members of staff

CREDITS: 30

LECTURES:
None.

CONTINUOUS ASSESSMENT:
One one-hour laboratory (on presentation preparation): tba
Participation in School Colloquia on Thursday 23rd April 2015

EXAMINATION:
None

ASSESSMENT:
Research project to be submitted by noon on Tuesday 14th April; Presentation of the project on 24th April 2015 (depending upon student numbers and group size)

FINAL GRADE:
Research Project: 85% weight
Presentation: 15% weight

SUPPLEMENTARY INFORMATION:
The outline of the research project must be approved by the supervisor and by the Director of Teaching by the end of the second week of the Candlemas semester.

PREREQUISITES:
Admission to Senior Honours in Applied Economics or Joint Honours

REQUIREMENTS:
Participation in Laboratory and Colloquia

Introduction
This module is designed to develop students’ independent research, writing and presentation skills and to enable them to apply economic and quantitative analysis to a selected topic in economics. The project must be on a topic in economics chosen from a list collated by the Director of Teaching or on a topic approved by him/her and by the proposed research project supervisor. For the EC4302 project the maximum number of words allowed is 10,000 but students will be advised to cover the topic in around 8,000 words.

Learning Outcomes
With the close assistance of your supervisor you will:
- master a body of literature dealing with a particular area of economics
- learn how to conduct bibliographic research
- gain experience in applied economic research and/or applied econometric research, and in particular in conducting and writing a sustained research project.

Why do a Research Project?
This module provides the opportunity for students to develop their skills in research, writing and presentation, and to focus a larger than usual share of their energies on a single topic which they have chosen themselves. The project report can also be shown to potential employers or postgraduate admission officers.

Ethics Committee
Students whose dissertation involves human subjects (e.g. interviews or experiments) must complete an Ethical Application Form. This should be endorsed by your supervisor and submitted to the Chair of the School Ethics Committee, for approval before proceeding with the work. If you think you may need to fill out an Ethical Application Form you should discuss the issue with your project supervisor. Application forms can be found at: http://www.st-andrews.ac.uk/utrec/forms/
**EC4501 Capital Investment Analysis**

**Martinmas Semester 2014**

<table>
<thead>
<tr>
<th>LECTURER:</th>
<th>MARTINMAS SEMESTER 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Gary Shea (Principal Module Teacher)</td>
<td></td>
</tr>
</tbody>
</table>

| CREDITS: | 15 |

<table>
<thead>
<tr>
<th>LECTURES:</th>
<th>LABORATORIES &amp; TUTORIALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 lectures + 2 class tests + 3 labs</td>
<td>3 x 1-hour problem laboratories beginning in week 4. To be held in normal lectures times and the normal lecture venues.</td>
</tr>
<tr>
<td>Fridays at 2 - 4 pm in Sch I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXAMINATION:</th>
<th>CONTINUOUS ASSESSMENT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 two-hour paper</td>
<td>First Class Test to take place on Friday 24 Oct.</td>
</tr>
<tr>
<td>Structure: One compulsory question and one question to be answered from a choice of two. Note: questions consist of several parts</td>
<td>Second Class Test to be place on 21 Nov. The class tests consist of one compulsory question that will have several parts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINAL GRADE:</th>
<th>REQUIREMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination 60% weight</td>
<td>Participation in all laboratories.</td>
</tr>
<tr>
<td>Class Tests 20% weight each</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PREREQUISITES:</th>
<th>SUPPLEMENTARY INFORMATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry into Honours Economics</td>
<td>EC4501 is required for Junior Honours qualification for the degree in Financial Economics. A mark of 7.0 or higher is required for entry into EC4502, Corporate Finance.</td>
</tr>
</tbody>
</table>

**Introduction**

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

**Learning Outcomes**

- You will learn the economic concepts of investment, return and risk.
- You will learn how the concepts of return and risk fit into a standard valuation model for investments – the Capital Asset Pricing Model (CAPM).
- You will learn the economic concept of market efficiency and the implications of market efficiency for doing investment valuation.
- You will learn the basic measures of investment value such as Net Present Value (NPV) and Weighted Average Cost of Capital (WACC).
- You will learn about the economic concept of an investment option and you learn some basic methods of valuing options.
- You will learn how to conduct investment analysis in settings of statistical uncertainty by using decision tree analysis. You will learn how to apply a simple model of binomial statistical uncertainty in decision tree analysis.
- You will develop a capacity to construct solutions to investment analysis problems by modeling value, risks and returns in relation to the statistical uncertainties surrounding them.
Course Outline

This module (and EC4502, Corporate Finance) uses a single textbook in addition to lecture material: Brealey, Richard A., Myers, Stewart C., Allen, Franklin, Principles of Corporate Finance, Tenth (Global) edition, 2011, McGraw-Hill. The textbook will also be a useful resource for EC4204, Financial Economic Theory (Senior Honours).

Topics include:
- Present Value
- NPV and Investment Decisions
- Risk Diversification and Beta
- CAPM and Discount Rates
- Capital Budgeting and Risk
- Decision Tree Analysis
- Using Market Values and Forecasting Cash Flows
- Capital Budgeting and Evaluation
- Market Efficiency
- Financial Investments and Security Issues
- Financial (Dividend and Debt) Policies in Efficient Markets
- Impacts of Income and Corporate Taxation

Lecture 1: Present Value
Brealey, Myers and Allen (2011), Chapters 2 and 4. Make sure that you have mastered Chapter 2 and the Maths Addendum for Lectures 1 and 2 on your own. Lecture 1 starts with Chapter 4 material.

Lecture 2: NPV and Investment Decisions
Brealey, Myers and Allen (2011), Chapters 5-6. Ignore Sections 5-2 (payback) and 5-4 (capital rationing).

Also look at Chapter 6. Section 6-1 is important, but Rule 3 about inflation, although important in your subsequent life, is not material to this module. In this module all problems are cast in real terms. That is, all PVs and FVs are expressed in currency terms, such as £, but goods’ prices (and the purchasing power of money) are always fixed. In most instances you will not have to worry about inflation in your problems.

Section 6-2 presents a good exercise, but in this module we do not work on problems in which working capital is a component of net cash flows. In our problems, net cash flows and operating cash flows are practically the same, with the following exceptions. At the beginning (t=0) of a typical problem some investment has to be made; at that time net cash flow will include the value of that investment and at the end of the life of a project (t=END) there may be some salvage value for the project’s assets, which also will be a part of net cash flows. At all other times, however, net cash flows will simply be operating cash flows. There is also material in Example 6-2 about the real-world relations between taxes and accounting depreciation; taxes will not enter our analyses until EC4502 and even then we shall analyse the connection between depreciation and taxes.

Sections 6-3 and 6-4 are quite important and related to these sections are Sections 12-2 and 12-3 in Chapter 12.

Lecture 3: Risk, Diversification & Beta
Brealey, Myers and Allen (2011), Chapter 7

Lecture 4: CAPM and Discount Rates
Brealey, Myers and Allen (2011), Chapter 7 & 8 (ignore Section 8-4)

Lecture 5: Capital Budgeting & Risk
Brealey, Myers and Allen (2011), Chapter 9. We come back to the definition of WACC and tax-adjusted WACC at a later time, so you can ignore WACC for the time being. Another concept that does not play a role in this module’s analyses is operating leverage. Assets can
be risky, but we do not analyse their riskiness as functions of corporate operating costs. We also do not concern ourselves with certainty equivalents (CEQs) in this module.

Lecture 6: Decision Tree Analysis
Brealey, Myers and Allen (2011), Chapter Section 10-4. This lecture will not be delivered to you live. But read the lecture and the associated textbook chapter section anyway.

Lecture 7: Market Values and Forecasting Cash Flows
Brealey, Myers and Allen (2011), Chapter 11

Lecture 8: Market Efficiency
Brealey, Myers and Allen (2011), Chapter 13

Lecture 9: Option Valuation (Basic Pricing)
Brealey, Myers and Allen (2011), Chapters 20 and 21. We do not employ Black Scholes (BS) option pricing formulas in any of our problems, so BS procedures you can skip over (Sections 21-3 and 21-4) if you wish. All options that we evaluate are European in style, so you can also skip over material relating to American-style options.

Lecture 10: Option Valuation (Real Options)
Brealey, Myers and Allen (2011), Chapter 22. As with Lecture 6, this lecture will not be delivered to you live, but certainly read it and the associated textbook chapter. The option to expand (or to make a later investment) is important as are the option to abandon and the option to wait-and-see (the timing option). We do not incorporate the option for temporary abandonment in our problems.

Lecture 11: Financial Investments and Securities Issues
Brealey, Myers and Allen (2011), Chapters 14, 15 & parts of 16.4 and 16.5. Chapters 14 & 15 are very fine, but very general, introductions about how firms issue financial liabilities. We do not worry about the real-world mechanics of venture capital and IPOs, but the fundamental distinction between private placements and public issues is very important to us (Section 15.5).

Lecture 12: Dividend Irrelevance (I)
Brealey, Myers and Allen (2011), Chp 16

Lecture 13: Dividend Irrelevance (II)
Brealey, Myers and Allen (2011), Chp 16

Lecture 14: Debt Policy (I) without Taxes
Brealey, Myers and Allen (2011), Chp 17

Lecture 15: Debt Policy (II) with Taxes
Brealey, Myers and Allen (2011), Chp 17

Homework and Problem Laboratories
There will be five sets of homeworks, which are extensive and exhaustive treatments of the material on which you will be examined. Some of the homework problems will be the subjects of the three problem laboratories.

Communication with PMT
This document should be the last piece of paper you will receive from me. Barring technical difficulties, the homeworks and lecture notes should be posted on the EC4501 MMS website.

Announcements will come to you via e-mail and the best way to get in touch is by e-mail at gss2@st-andrews.ac.uk. I therefore require every student to have a University e-mail
address. If you have not yet got one, sort it out with IT Services. If you need an appointment to meet with me, please book it through Mrs Eliana Wilson (tel. 462439, pgsececon@st-andrews.ac.uk) manages my appointments.

**Note on Financial Calculators**

You do not need a financial calculator for this course and having one, even in an examination, will give you no practical advantage. You do need a regular calculator for homework and exams, which can calculate inverses and powers.

**Exam and Class Test**

Class tests will each consist of one compulsory question that will contain a number of parts. The exam is held in the examination diet for the Martinmas semester before Christmas 2013 (date and location to be announced). The exam consists of one compulsory question (which also contains parts) and one question which can be taken from a choice of two (these questions also contain parts). The class tests and the exam are not optional and must be attempted. The weighting for the final grade is 60% for the exam and 20% for each class test.

**How to do well in this course**

This is a course in problem solving. You will not be asked to write an essay. Memorising notes and studying the lectures is not a good way to revise for a class test or an examination. What is important is a) understanding the lecture material as soon as possible after each lecture and b) getting lots and lots of practice in problem solving via the homework.

**Understanding the Lecture Material**

This means understanding everything in class notes, the homework problems and understanding the relevant parts of the textbook. Please note that the material in the lectures will depart from the textbook in many places. Therefore, it is imperative that you attend the lectures.

The best way to learn is by preparing before lectures, by reading the relevant part of the textbook in advance and studying your lecture notes after lectures carefully making sure that you understand everything contained in the lecture. It would be a very good idea for you to download the notes prior to a lecture, print them off and bring them with you to the lecture. That would save you a lot of writing and allow you to pay closer attention to the lecture itself.

**Getting lots of practice**

This means doing the homework and all practice problems and trying out optional problems. If you do not have a good background in maths then you can still do well in this class, however, practice at the problems will be more important for you. People who feel unsure of maths, or who have exam anxiety should practice, practice and practice. This will increase your confidence with maths and will certainly help when it is time to sit the exam. The more practice you do, the better you will do in the class test and the exam.
**Introduction**

In this module we investigate the problem of how a collection of corporate liabilities are affected in value by corporate actions. Possible actions include corporate investment decisions, decisions regarding the firm’s financial structure, changes in management rules and compensation and changes in the scope, specialisation and legal environment of the corporation’s business. As in the prerequisite module, EC4501, 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 Outcomes**

- You will learn about the formal structure of corporate liabilities (debt, equity and options) and how the tools that were mastered in EC4501 can be as successfully applied to the valuation of corporate liabilities as they can be applied to the valuation of corporate assets.
- You will learn how the valuation of corporate liabilities can be affected by the value of corporate assets.
- You will learn how the valuation of corporate liabilities can be affected by corporate financing decisions, such as dividend or debt policies.
- You will learn how the concept of market efficiency importantly modifies the interaction between corporate asset and corporate liability values.
- You will learn how the techniques of corporate liability evaluation are central to understanding the wider implications of corporate restructuring such as mergers, acquisitions and spin-offs.
- You will learn importantly how different corporate tax and personal income tax regimes affect the choice of appropriate tools of analysis.
- You will develop an ability to judge the appropriateness of different valuation techniques in the face of tax complications and statistical uncertainty.
Introduction

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 Outcomes

Students will become familiar with the main objectives and methods of behavioural economics. They will learn about some systematic ways in which the textbook models of rational choice are violated in the context of riskless, risky, uncertain, intertemporal and strategic choice. They will also be introduced to some alternative behavioural theories that incorporate insights from psychology and help explain some of the observed deviations of actual behaviour from the predictions of the standard models. Students will also learn about the possible welfare implications of such behaviour.

Course Outline


Preliminary Reading

Introduction

This course is an analytical treatment of industrial organization 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: Models of intra-industry competition, including discussion in game theoretic terms; market structures, economies of scale, entry and exit; product differentiation, innovation; mergers.

Learning Outcomes

By the end of this module students should be able to:

- to understand and use non-cooperative game methods to construct and manipulate models of the firm and the industry and derive welfare/policy conclusions;
- to understand how market structures affect and are affected by the firm behaviour, strategies and market outcomes;
- to understand the interaction between competition and innovation;
- to appreciate the use of industrial/competition policy to promote the social welfare/consumer surplus and economic growth.

Course Outline

The main textbook is *Industrial Organization – Theory and Applications* by Oz Shy, MIT Press 1995, supplemented by additional readings and handouts.

The topics to be covered are:

1. Cournot Competition with free entry; excess entry thorem.
2. Product differentiation: taste for variety, horizontal, vertical.
3. R&D and competition: tournament and non-tournament models.
4. Mergers.
5. Competition Policy.
Introduction

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

Learning Outcomes

The learning outcomes from which the module content will be chosen include the following. Students will gain a thorough understanding of the role of international relative price movements in open economies, how these relative price movements can be modelled, and how successful attempts to model exchange rates have been empirically.

Course Outline

Topics will be taken from the following areas:

1. Exchange Rates and the Balance of Payments
2. Prices and Financial Markets in an Open Economy
3. Macroeconomic Policy in an Open Economy
4. The Monetary Approach to the Balance of Payments
5. Monetary Models of Exchange Rate Determination

Preliminary Reading

**EC4510**  
**Issues in Economic Policy**  
Martinmas Semester 2014

<table>
<thead>
<tr>
<th><strong>LECTURER:</strong></th>
<th><strong>CREDITS:</strong> 15</th>
</tr>
</thead>
</table>
| Dr Luca Savorelli (Principal Module Teacher)  
Dr Margherita Negri  
Dr Shoujian Zhang | |

<table>
<thead>
<tr>
<th><strong>LECTURES:</strong></th>
<th><strong>TUTORIALS:</strong> None</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 two-hour lectures, 1 lecture per week, Tuesdays 4 - 6 pm in F2.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>EXAMINATION:</strong></th>
<th><strong>CONTINUOUS ASSESSMENT:</strong> 1 essay (1,500 words) to be submitted by noon on Wednesday 5th November.</th>
</tr>
</thead>
</table>
| One two-hour paper  
Structure: Answer two questions from four questions | |

<table>
<thead>
<tr>
<th><strong>FINAL GRADE:</strong></th>
<th><strong>SUPPLEMENTARY INFORMATION:</strong> This module is not available to Senior Honours Applied Economics students</th>
</tr>
</thead>
</table>
| Examination: 60%  
Continuous Assessment: 40% | |

<table>
<thead>
<tr>
<th><strong>PREREQUISITE:</strong></th>
<th><strong>ANTIREQUISITE:</strong> EC4205</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission to Senior Honours Economics, Senior Honours Financial Economics or Joint Senior Honours Economics.</td>
<td></td>
</tr>
</tbody>
</table>

**Introduction**

The aim of the module is to introduce you to and get you to think about a range of issues in contemporary economic policy. While those issues studied will be based largely on current discussion in the UK, there will be a number of issues that inevitably have a more international focus and in these cases we shall explore the nature of the debate in different countries.

**Learning Outcomes**

- To appreciate and understand a range of contemporary policy issues, both national and international.
- To appreciate and understand the role of economic analysis in the design and implementation of policy.
- To appreciate and understand the role of evidence in the design and implementation of policy.
- To be able to debate and discuss policy issues.

**Course Outline**

The module has a single component: a lecture component (shared with EC4205).

**Lectures**

We will look at specific topical policy issues and will use economic tools to analyse these. Because the policy agenda is continually changing, the actual topics covered vary from year to year but examples are health policies, educational policies, unemployment benefits, immigration, employment protection, etc.
<table>
<thead>
<tr>
<th>EC4512</th>
<th>Law and Economics</th>
<th>Candlemas Semester 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>LECTURERS:</td>
<td>Dr Ian Smith (Principal Module Teacher)</td>
<td>CREDITS: 15</td>
</tr>
<tr>
<td>LECTURES:</td>
<td>18 lectures, two lectures per week on Monday 4 – 5 pm and Tuesday 2 - 3 pm in Sch I.</td>
<td>TUTORIALS: None</td>
</tr>
<tr>
<td>EXAMINATION:</td>
<td>A single two-hour paper</td>
<td>CONTINUOUS ASSESSMENT Two class tests on Monday 23rd February (week 5) and on Monday 6th April (week 9)</td>
</tr>
<tr>
<td>FINAL GRADE:</td>
<td>Examination: 60% Continuous assessment: 40%</td>
<td>PREREQUISITE: Admission to Honours Economics</td>
</tr>
</tbody>
</table>

Introduction

The module is designed to develop an analytical understanding of the economic function of legal principles and procedure, using microeconomic theory. Students analyse property, contract, family, tort and criminal law by the application of economic models and techniques. Topics include optimal criminal deterrence, property and liability rules of nuisance, optimal breach of contract, and the costs of accidents.

Learning Outcomes

On completing the module, students should:
- appreciate the power and role of economic theory in the analysis of the rules, procedures and institutions of the legal system
- know how to interpret legal rules and outcomes in terms of allocative efficiency and consequences for social welfare and income distribution
- understand the criticisms of the economic approach to law
- know how to explain the economic basis of property law in terms of creating, defining and enforcing exclusive rights to the use of resources
- know how to model contract law in terms of permitting the exchange of property rights and the provision of remedies for breach and the effects on investment incentives
- understand the theory of tort liability, its applications and the economic differences between strict liability and negligence
- know how to model the economic character and function of criminal law and sanctions

Course Outline

1. The general structure of law and the legal process
2. The economics of property rights
3. Accident law: liability and deterrence
5. Theory of litigation
6. Explaining criminal law
7. Criminal deterrence with monetary and nonmonetary sanctions
EC4514
Monetary Policy

LECTURERS:
Professor Andy Hughes-Hallett (Principal Module Teacher)

Candlemas Semester 2015

CREDITS: 15

LECTURES:
18 hours of lectures beginning in Week 1 on Thursdays and Fridays from 2 - 3 pm in School I.

TUTORIALS:
None

EXAMINATION:
A single two-hour paper
Structure: tba

CONTINUOUS ASSESSMENT:
One essay (1,500 words) to be submitted by 12 noon on Wednesday 15th April.

FINAL GRADE:
Examination: 60%
Continuous assessment: 40%

PREREQUISITE:
Admission to Honours Economics

Introduction
The module is designed to provide a specialised understanding of monetary policy issues, via an examination of a range of material.

Learning Outcomes
By the end of this module students should understand the following:
• the rationale for counter-inflationary monetary policy
• how monetary policy is operated
• how to assess the different kinds of targets used in monetary policy, and to explain the analytical reasoning underlying them
• the concept of central bank independence and its strengths and weaknesses
• why so many countries introduced monetary targets in the 1970s, why some countries have also used exchange rate targets in some periods, and why certain countries switched to inflation targeting in the early 1990s
• how to evaluate the success or otherwise of these strategies
• how to characterise the behaviour of a central bank in terms of a ‘Taylor rule’
• understand the rationale for, and scope of, unconventional monetary policies

Course Outline
1. Role of money, costs of inflation and the case for price stability.
2. Theory and Frameworks for Monetary policy.
3. Discretion versus rules in monetary policy, Time-inconsistency and central bank independence and the trade-off between the inflation bias and output stabilisation.
4. Changes in UK monetary policy over the last three decades.
5. Inflation Targeting and operational rules for monetary policy such as the Taylor rule
6. Central bank transparency
7. Communication and announcements in monetary policy.
8. Quantitative easing and forward guidance policies.
EC4519
Development Economics

Candlemas Semester 2015

LECTURERS:
Dr Geetha Selvaretanam (Principal Module Teacher)

CREDITS: 15

LECTURES/SEMINARS:
2 hours x 9 weeks
Tuesdays 4 - 6 pm in ARB317.

TUTORIALS: None

EXAMINATION:
1 two-hour paper
Students should answer three questions out of six.

CONTINUOUS ASSESSMENT:
One essay should be submitted before 12 noon on Friday 13th March.

FINAL GRADE:
60% for Examination
20% for Essay 1
20% for Essay 2

SUPPLEMENTARY INFORMATION:

PREREQUISITES:
Admission to Honours Economics

Introduction

The course covers some important theoretical and practical aspects of development economics. It will discuss topics that are important for economic development and growth such as income inequality, poverty, education, health, role of women, foreign investment, aid, international trade policy etc.

Learning Outcomes

1. Understand and being made aware of various issues concerning the developing countries and how to assist them.
2. Understand some of the theories and how to apply them to these development related issues.
3. Learn how empirical tests are carried out and how the results can be made use of.
4. Learn about government policy in developing countries, international trade policy, international aid policy.

Course Outline

Both books will be used for mainstream teaching, supplemented by appropriate journal articles.

The following course outline may be altered. A detailed outline with readings would be given at the beginning of the semester.

1. Income inequality, poverty.
2. Role of Population in economic development
3. Rural-urban migration.
4. Education and Health
5. Markets in Agriculture (land, labour, credit, role of women)
6. Environment and development
7. Foreign investment, Aid, debt relief
8. International trade policy
9. Government policy towards development
10. Economic Growth (depending on what students have learnt in other modules).
Introduction

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 or 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 course. 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.

Learning Outcomes

By the end of the course, students should:
- Understand and evaluate various approaches to the economic concept of inequality.
- Assess and compare different measurement techniques.
- Understand a range of contemporary inequality issues and how policies are designed to deal with them.
- Be able to discuss the relation of inequality with other economic criteria.
- Be able to design and analyse empirical tests for explaining inequality.
- Learn about the evolution and driving forces of economic inequality.

Course Outline

This course discusses economic inequality by focusing on its domain, measurement, history, theory and empirics. The module consists of three main parts. The first part, “What is Inequality? Inequality of What?” includes conceptual discussions of inequality, supported by real life examples. Different forms of inequality and the relevancy of each of them for social and global welfare is discussed here. The second part, “Assessing Inequality” provides an overview of different measures of inequality and their specific properties. How an inequality measure is developed with reference to the specific question in hand and how different judgments about inequality result in different measurement techniques constitute the main focus of this part. The last part “Explaining Inequality” is developed around empirical studies of inequality. An historical perspective is sustained here, by discussing the main trends in the evolution of inequality and the underlying reasons for these trends. Policy oriented discussions are of concern of this part as well.
NB. This module is available only to Senior Joint Honours Students.

<table>
<thead>
<tr>
<th>EC3202</th>
<th>Martinmas Semester 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Econometrics 1: The Classical Linear Regression model</strong></td>
<td><strong>CREDITS: 15</strong></td>
</tr>
<tr>
<td><strong>LECTURER:</strong></td>
<td>Dr Peter Macmillan (Principal Module Teacher)</td>
</tr>
<tr>
<td><strong>Dr Radoslaw Stefanski</strong></td>
<td><strong>LECTURES:</strong></td>
</tr>
<tr>
<td>18 lectures + 2 class tests</td>
<td>2 lectures per week</td>
</tr>
<tr>
<td>Thursdays and Fridays 10 – 11 am in the Irvine Lecture Theatre.</td>
<td><strong>TUTORIALS:</strong> 6 x 1 hour tutorials in weeks 2, 4, 5, 7, 8 and 10.</td>
</tr>
<tr>
<td><strong>LABORATORIES:</strong></td>
<td>3 x 2 hour laboratories in weeks 3, 6, and 9.</td>
</tr>
<tr>
<td><strong>EXAMINATION:</strong></td>
<td><strong>CONTINUOUS ASSESSMENT:</strong></td>
</tr>
<tr>
<td>2 sections</td>
<td>2 Class Tests:</td>
</tr>
<tr>
<td>Section 1: A single compulsory question.</td>
<td>First Class Test will take place on Thursday 30th October at 10 am</td>
</tr>
<tr>
<td>Section 2: One question from two.</td>
<td>Second Class Test will take place on Friday 21st November at 10 am</td>
</tr>
<tr>
<td><strong>FINAL GRADE:</strong></td>
<td><strong>REQUIREMENTS:</strong> participation in at least 5 (five) tutorials.</td>
</tr>
<tr>
<td>Examination 70% weight</td>
<td><strong>PREREQUISITES:</strong></td>
</tr>
<tr>
<td>Class Tests 15% weight each.</td>
<td>Admission to Honours degree programmes in Economics</td>
</tr>
</tbody>
</table>

**Introduction**

This module will introduce students to basic econometrics. The classical linear model is taken as a starting point. Several important extensions and modifications are covered that are essential for the analysis of economic and financial data. Basic econometric methods are essential components of the toolkit of a trained economist. They can also be viewed as supporting evidence-based decision-making more generally and as such constitute transferable skills in relation to many types of career.

EC3202 builds upon skills acquired in the sub-Honours quantitative modules EC2003 and EC2004 and provides a foundation for further study in EC4202, Econometrics 2.

**Learning Outcomes**

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

- Be able to understand and critique analyses based on the classical linear regression model
- Be able to use the classical linear regression model and some extensions to test economic theories and generate predictions
- Have a basic grasp of the methodological challenges posed and possibilities offered by different data types within the context of the linear regression model
- Be able to use the Stata econometrics package, to interpret its output, and to produce replicable and auditable pieces of analysis
- Be able to understand and interpret empirical econometric results.
Course Outline

Topics include (not necessarily in the order below)

1. Simple bivariate linear regression
2. Estimation in multiple regression models
3. Omitted variable bias
4. Multicollinearity
5. Inference in multiple regression models
6. Large sample properties of OLS
7. Various further issues in multiple regression analysis
8. Use of qualitative information in regression analysis
9. Heteroskedasticity
10. Misspecification and other (data) issues
11. Introduction to time series modelling
12. Serial Correlation plus other issues with time series modelling

The main textbook for this course is: WOOLDRIDGE, J.M. (2013): *Introductory Econometrics: A Modern Approach*, 5th edition (South-Western), which is also available in a slightly modified form as: WOOLDRIDGE, J.M. (2014): *Introduction to Econometrics: European, Middle East and Africa Edition*. This is essentially the essentially same as the 4th edition of the text. You are advised to purchase the book in one of its disguises. There are hundreds of books on econometrics out there, some other texts that you may find useful for further reading on and around the topics covered in the course include:


The econometric software to be used in the course (Stata) is available in the Butts Wynd computer lab and in the Economics computer lab.
NB. The following two modules are available only to Senior Honours students who spend their Junior Honours year abroad.

<table>
<thead>
<tr>
<th>EC3201 Advanced Microeconomics</th>
<th>Martinmas Semester 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LECTURER:</strong> Dr Jim Jin (Principal Module Teacher) Dr Margherita Negri</td>
<td>CREDITS: 30</td>
</tr>
<tr>
<td><strong>LECTURES:</strong> 26 lectures 3 lectures per week Monday, Tuesday, Wednesday at 10-11 am in the Irvine Lecture Theatre.</td>
<td>LABORATORIES AND TUTORIALS: 4 x 1 hour laboratories (weeks 3, 5, 7 and 9) and 4 x 1 hour tutorials starting in (weeks 4, 6, 8 and 10)</td>
</tr>
<tr>
<td><strong>EXAMINATION:</strong> 1 three-hour paper Structure: 3 sections, one section of compulsory mathematical questions, one of optional math questions, another section of optional essays</td>
<td>CONTINUOUS ASSESSMENT: 1 class test of math questions on Tuesday 21st October at 10 am. 1 Essay (1,500 words) to be submitted by noon on Monday 17th November.</td>
</tr>
<tr>
<td><strong>FINAL GRADE:</strong> Examination, 70% weight 1 test and 1 essay, 15% weight on each</td>
<td>REQUIREMENTS: Participation in at least 3 laboratories and at least 3 tutorials.</td>
</tr>
<tr>
<td><strong>PREREQUISITES</strong> Admission to Honours programmes in Economics</td>
<td></td>
</tr>
</tbody>
</table>

**Introduction**

The module is designed to provide an advanced understanding of selected, but central topics in microeconomics. Students will be introduced to a range of formal analytical models that will help develop their understanding of microeconomic theory. The module aims to develop a mathematical base to the economic theory.

**Learning Outcomes**

By the end of this module students should know and understand the following:
- The principles of maximization as applied to consumer theory
- Production theory and competitive firm behaviour
- The concept of a general competitive equilibrium
- The choice under uncertainty and game theory
- The theoretical models of monopoly and oligopoly
- The theory of externalities and public goods

**Course Outline**

The following textbooks can be used:
The planned module progression:
1. Math and consumer theory: 7 lectures;
2. Firm theory in perfect competition: 4 lectures;
3. General equilibrium: 3 lectures;
4. Uncertainty and games: 3 lectures;
5. Imperfect competition: 5 lectures;
Introduction
The module is designed to provide an advanced understanding of monetary and macroeconomics. Students will be introduced to a range of formal analytical models that will help develop their understanding of key macroeconomic and monetary relationships.

Learning Outcomes
By the end of this module students should know and understand the following:

- the main features of Real Business Cycle analysis and its strengths and weakness in explaining actual business cycle data
- the main features and strengths and weakness of New Keynesian macroeconomics (such as menu costs, sticky wages and imperfect competition)
- the main theories and empirical facts relating to the determination of consumption, investment and unemployment
- the role of reputation and credibility in monetary policymaking and the ways in which monetary policy institutions can be designed in order to maximise welfare
- the role of the government budget constraint and public debt in determining the effects of fiscal policy
- differences in long-run growth

Course Outline
1. Real business cycle analysis
2. New Keynesian macroeconomics
3. Credit markets
4. Unemployment and the labour market
5. Monetary policy, stabilisation policy, time inconsistency and monetary institutions
6. Fiscal policy, the government budget constraint and government debt
7. Advanced topics in growth theory
8. Academic Appeals, Complaints and Disciplinary Issues

The University is committed to ensuring as high a quality student experience as possible while studying at St Andrews. Occasionally things may go wrong and if you are experiencing a difficulty, or are dissatisfied with your academic experience, you should raise concerns as soon as possible. This allows effective resolutions to be worked out quickly. Such issues normally fall into one of three categories:

- **An appeal** requesting a formal review of an academic decision - where, for example, the University has made a judgement about your assessed work or progression within a course of study which you have grounds to query (see the relevant Policy on Student Academic Appeals);

- **Complaints** - where you are dissatisfied with the quality or standard of service that you have received from any part of the University, either academic or non-academic (see the University's Complaints Handling Procedure);

- **Disciplinary cases** - where the University has grounds to believe that you have conducted yourself in an unacceptable manner in either an academic or non-academic context. Academic Misconduct is dealt with under the Good Academic Practice Policy; Non-Academic Misconduct is dealt with under separate procedures.

If there are extenuating personal circumstances that may affect your academic performance or impact on your progression you must bring these to the attention of an appropriate member of staff (for example your Academic Adviser, module coordinator or the appropriate Pro Dean) as soon as possible and normally prior to completing any assessment. If you base a subsequent academic appeal on such extenuating personal circumstances, you will be required to provide valid reasons to explain why you failed to notify the examiners or other relevant persons of these circumstances prior to completing the assessment.

8.1 Using the Right Procedure

If you are unsure whether to use the Appeals procedure or the Complaints procedure, there is a key question to ask yourself. What kind of outcome are you seeking? If you are seeking to have an academic decision changed (such as a mark or grade, or a decision about progression or termination of studies), then you must use the Appeals procedure. The permissible grounds for submitting an appeal are clearly detailed therein. If you are dissatisfied with the level of service you have received from the University, or if you believe that a service needs to be improved, or that the University has failed (for example) to follow one of its administrative processes properly, then the Complaints procedure is normally more appropriate. For matters involving teaching in general, there are also feedback opportunities through Staff-Student Consultative Councils, module questionnaires and School presidents.

You can make both a personal Complaint and an Appeal, by using both the Appeal and Complaints procedures, but it must be emphasised that changing an academic judgment or decision is not one of the outcomes from the Complaints procedure used alone.

8.2 Further guidance and support

The Students' Association provides independent and confidential help and advice for students who are contemplating submitting an academic appeal, complaint or are having discipline proceedings taken against them. The Students’ Association employs Iain Cupples, the Student Advocate (Education), whose job it is to ensure that you receive help with writing and submitting a submission. Iain can also accompany you to any hearing. He should be your first point of contact as soon as you feel you need help.

**Contact**

Iain Cupples
Student Advocate (Education)
Telephone: 01334 462700
Email: inc@st-andrews.ac.uk
9. Feedback
Students receive routine feedback on any work that they have submitted. Feedback will give you advice that will guide you to improving your learning and future performance. The type of feedback you will receive on continuous assessment, will vary between modules. It will include structured feedback and comments on submitted continuous assessment and electronic feedback, for example through MMS, on class tests. Where you feel you need further feedback or clarification you should make an appointment with the marker of the piece of work during his or her office hours. Markers will provide you with feedback to help you improve your performance, but will not provide further detailed explanation or justification of a mark (your work is already carefully marked). A meeting with a marker is not an opportunity to lobby for a higher mark. For further information on feedback, provided by the University, go to: (http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/student-feedback.pdf).

9.1 Examination Scripts – Feedback Day
There is a feedback day early each semester. On feedback day you can meet with a marker of any (economics) examination that you took in the previous semester, in order discuss your exam performance, if you so wish. Feedback days this year are scheduled to be held on Wednesday 24th September 2014 and Wednesday 4th February 2015. If these dates change you will be notified and you will be emailed early in each semester with details regarding the process. Some staff may not be available during the feedback day, in such cases alternative arrangements will be put in place. Please note that the School cannot provide feedback upon exam performance outside of this arrangement.

9.2 Examination Scripts - Photocopy
Students are entitled to request a copy of any of their own completed examination scripts. If a photocopy of the script is required for personal reference, please contact the School Administrator and on payment of a fee of £10 per examination script a photocopy will be provided to the student within 5 working days. Such requests should be made by the end of week 3 of the Semester that follows the examination diet. Please note however, there is usually very little in the way of comments / feedback written on an exam script by a marker.

9.3 Submitted Continuous Assessment
Your assignments are returned to you with a feedback sheet. This sheet allows the School to structure the feedback you get on your assignment across a number of different categories, in order to help you identify your strengths and weaknesses. These categories broadly correspond to the criteria outlined in section 5.6.1, regarding the standard/quality of written work. So, for example, if you get an ‘x’ placed in the ‘clarity / coherence / structure’ row of the feedback sheet, under 14-16, it suggests the marker believes that ‘a connected, clear and coherent argument’ was present in most or all of the text’. The feedback sheet also provides space for brief comments that help explain the reason for the mark you get and how you might improve your work. Please note your assignment mark is unlikely to be an average of the categories across which the School provides feedback. It is important to realise that some categories will be more heavily weighted than others when it comes to determining a mark (for example the content of an assignment is obviously significantly more important than the organisation of your bibliography). Please also note that these weights are not fixed across assessments. They are likely to vary across different types of assessment and even from question to question. For example some assignments may require greater detail or technical rigour than others. See the School essay writing guide for further information http://www.st-andrews.ac.uk/economics/pdf/essaywriting.pdf.

10. Other information
10.1 Prizes
The Nisbet Prize and the Blair Prize are awarded to the two best students in Senior honours Economics. There are Zawadski prizes in Financial Economics (best student in EC4204) and monetary policy (available to SH or JH). There is also the David T Ulph Prize for the best undergraduate dissertation / research project.
10.2 Your Personal Tutor
Each honours student will be allocated a personal tutor, with whom he/she should meet at least twice a semester throughout his/her Honours programme. The list of personal tutors is posted on the School noticeboard at the start of term. All personal tutees are required to make an appointment with their personal tutors in week 4 and in week 10.

The personal tutor is the appropriate person to approach for advice on matters such as study skills and examinations techniques, and will be the natural person to write academic or job references for the student. If your personal tutor does not know you, he or she will naturally have difficulty discharging his or her duty.

10.3 Deans’ List, University Scholarships, Internships and Prizes

Deans’ List
This is an annual award for academic excellence, promoted by the Deans of the University. Undergraduate students who achieve an outstanding overall result in the course of an academic year have their names inscribed on the Deans’ List, an honour which will also appear on your University transcript. The criteria for the award are strict. Only students taking no fewer than 120 credits counting towards an approved degree programme over the course of an academic year will be eligible and all credits have to be taken within the four Faculties of the University of St Andrews. Any student who meets all the criteria and who obtains a credit-weighted mean grade of 16.5 or above for the year will be recorded on the Deans’ List. The rules will be adapted for part-time students, who must achieve the minimum credit-weighted mean of 16.5 in 120 credits taken part-time over no more than three academic sessions. Full details of all the criteria and conditions for the Deans’ List are available at [http://www.st-andrews.ac.uk/schools/contacts/prodeans/deanslist/](http://www.st-andrews.ac.uk/schools/contacts/prodeans/deanslist/)

Undergraduate Research Internship Programme (URIP)
This programme was introduced with the intention of giving undergraduate students the opportunity to experience research during the summer vacation. The URIP is open to students who are matriculated at the University of St Andrews and who will typically have completed their penultimate year of studies. URIP funding (currently at £180 per week for up to ten weeks) cannot be used to support research for a credit-bearing programme. Details of the scheme, including information about the application procedures, are published during the academic year. The programme is administered by the Deans of Arts/Divinity and Science. For full details of the application process visit [http://www.st-andrews.ac.uk/students/academic/internships/](http://www.st-andrews.ac.uk/students/academic/internships/)

Other University Prizes and Scholarships
The Principal’s Medal is also awarded to students who show exceptional endeavour and achievement. The University also provides a small number of scholarships and awards. See the ‘Scholarship, prizes, medals and awards section of the Student Handbook ([http://www.st-andrews.ac.uk/studenthandbook/](http://www.st-andrews.ac.uk/studenthandbook/)) for more details.

10.4 The Staff Student Consultative Committee (SSCC)
The SSCC is split into two committees, the Undergraduate Staff Student Consultative Committee (USSCC) and the Postgraduate Staff Student Consultative Committee (PSSCC). The USSCC normally meets twice a semester to discuss issues relating to the learning and teaching of Economics that concern you. This is an important body and the main medium through which the undergraduate student body can communicate concerns or suggestions they have regarding teaching and assessment within the School. There are staff representatives and student representatives from all undergraduate economics classes. Usually three or four Senior honours students representatives will be elected early in the Martinmas semester (one joint honours economics rep, one single honours economics, one financial economics and one applied economics).

The School President is elected toward the end of the second semester. The School President participates in the School Teaching Committee.

For further information, including how SSCC elections are run and how to stand, go to [http://www.yourunion.net/voice/academicreps/classrepresentatives/classrepelections/](http://www.yourunion.net/voice/academicreps/classrepresentatives/classrepelections/). For
further information on the School SSCC or to contact your representative or the School President go to: http://www.st-andrews.ac.uk/economics/undergrad/committees1.html

10.5 Advising/Re-Advising/Changing or dropping modules
At the beginning of each session, before matriculation in the University, undergraduate students must see, in person, their Adviser of Studies, who will approve their choice of modules and can also give help and guidance on matters relating to academic progress. For more information on the advising and matriculation process as well as how to re-advise and change modules if you wish, go to http://www.st-andrews.ac.uk/students/academic/advising/.

Please note you cannot change modules after Monday 1.00 pm of week 2 for each semester.

10.6 Updating personal details/Communicating with the University
You are responsible for ensuring that your contact details are kept up to date. You may do this at any time during the year via your E-vision account which can be accessed from the Current Students (link is on the red banner) section of the University home page http://www.st-andrews.ac.uk/students/.

Your university e-mail account is the official means of communication for the University and you are therefore reminded that you should read your e-mails at least every 48 hours (particularly during the academic year). It is important you communicate with the School through your University account. Please do not use other accounts you have. You can arrange to have your University e-mail account automatically forwarded to your personal external account. However you should be aware that there may be problems with this and you should check regularly to make sure the forwarding is working.

10.7 Withdrawal from Studies
If you are considering withdrawing from your studies at the University you should discuss the matter with your Adviser of Studies in the first instance or your Supervisor if you are a Research Postgraduate student. You should arrange to do this as early as possible as there are often alternative options open to you that would not require the final step of permanent withdrawal from the University. If you do decide you wish to withdraw from your studies you must contact the appropriate Pro Dean who will be able to offer guidance on your options and who will ensure that the process is completed correctly. You should be aware that there are fee implications, as well as implications to your leave to remain in the UK if you are an overseas student, when you withdraw from your studies part of the way through an academic year. You should therefore ensure you contact the Money Adviser and the International Adviser in Student Services to obtain early advice on the final implications of your decision before you complete your withdrawal. For more information please consult the Student Handbook (https://www.st-andrews.ac.uk/students/advice/academic/leavingorwithdrawing/).

10.8 Advice and Support for Students
For advice and support on any issue, including academic, financial, international, personal or health matters, or if you are unsure of who to go to for help, please contact the Advice and Support Centre, North Street, 01334 462020 or email theasc@st-andrews.ac.uk.

Students may wish to obtain advice and guidance from within the School in the first instance. If so you should contact the School Administrator who will identify the most appropriate person to speak to you. If you register with the University as having special needs, please also let the School Administrator know.

Please be assured that personal matters will be dealt with confidentially and information will treated in accordance with the University Student Confidentiality Policy.

10.9 Disability Support
If for disability reasons you require support, for example teaching and exam arrangements, please contact the disability team at the contact below. Student services provides support for a wide range of disabilities such as; Learning difficulties, visual and hearing impairments, mobility difficulties, Aspergers, mental health, long standing medical condition and much more. Please
also contact the School Administrator. For further information see http://www.st-andrews.ac.uk/students/advice/disabilities/

10.10 Personal Circumstances
If there are any personal circumstances that influence your academic performance it is important you bring these to the attention of the University. You can raise any personal circumstances in confidence with Student Services (see below) or the Pro Dean of your Faculty. Please also bring them to the attention of the School Administrator as soon as possible (via Student Services if you wish). See the ‘Advice, support and guidance’ and/or the ‘Support and learning’ sections of the Student Handbook (http://www.st-andrews.ac.uk/studenthandbook/) for further information.

10.11 Health and Safety
A first-aid box is located in the School Office (F1).

Notices are posted throughout the School indicating who the appropriate person in charge of First Aid is and how to contact them. Notices are also displayed detailing your exit routes and assembly points in the event of fire. All students should familiarise themselves with this information.

The School Health & Safety Officer is the School Secretary (School Office, F1). Any hazards or safety-related incidents should be reported to the School Health & Safety Officer or the School Office immediately.

Students are reminded that the misuse of any Safety, Fire or First Aid equipment will result in discipline.

For further details on Health and Safety for students within the University see the Environmental Health and Safety Services Webpages http://www.st-andrews.ac.uk/staff/policy/healthandsafety/. For further information on wider Health and Safety issues go to the Health and Safety section of the Student Handbook.

10.12 IT/Library
For information on computing facilities and IT services, please see http://www.st-andrews.ac.uk/its/ For information on use of the University Library, please see http://www.st-andrews.ac.uk/library/

10.13 Mathematics Support Centre
Students lacking confidence in their mathematical ability or having difficulty with any mathematical or statistical aspect of the course may visit the University's Mathematics Support Centre, a place where students from all Schools can obtain one-to-one help with any mathematics-based problem. To find out more about the Centre go to https://www.st-andrews.ac.uk/students/academic/advice/studyskillsandadvice/mathssupportcentre/

10.14 The Careers Centre
website is at http://www.st-andrews.ac.uk/administration/careerscentre/

10.15 CAPOD
CAPOD is the University’s central point for assistance with teaching and learning. It aims to encourage excellence and innovation in learning and teaching by providing support and guidance for students and staff. It also now houses a Mathematics Support Centre. Its website is http://www.st-andrews.ac.uk/capod/

10.16 Orientation Week
Students are reminded that Orientation Week is an integral part of the University semester. Matriculation takes place during Orientation Week. It also offers students an opportunity to prepare for classes by purchasing and beginning work on course material. Schools also hold induction meetings during this time. For further information see http://www.st-andrews.ac.uk/orientation/
10.17 **Student Fees**
For full information on the Tuition Fees that you will be liable to pay throughout your studies go to [http://www.st-andrews.ac.uk/students/money/](http://www.st-andrews.ac.uk/students/money/). Please note that when you graduate (either in person or in absentia), this marks the end of your degree or diploma course of studies at the University of St Andrews. If you have been accepted into a new degree or diploma programme at the University, the new programme is separate and distinct from the course of studies from which you are about to graduate, and you will be liable for all fees associated with the new programme.

10.18 **Degree Regulations**
A regulatory structure determined by Senate and Court governs the award of all degrees. Undergraduate Resolutions and Regulations are available at [https://www.st-andrews.ac.uk/students/rules/ugsenateregulations/](https://www.st-andrews.ac.uk/students/rules/ugsenateregulations/).

10.19 **Questionnaires and Student Feedback**
A major aim of the School (and of the University) is to make sure your honours level modules are well taught and delivered efficiently. The main way the School and the University can fully gauge the success of its teaching is through the use of questionnaires. All surveys and questionnaires are conducted anonymously and on a voluntary basis (i.e. you do not need to take part if you don't wish to). It is however, important the School identifies any weaknesses in its teaching in order to take corrective action. It is also important we identify aspects of our teaching that work well. The School will ask you to anonymously fill out a questionnaire towards the end of teaching in all of your economics modules. The answers you provide will help is improve and refine our lectures in subsequent years. We may also ask you to take part in the CTI Economics Survey. This is an internet based survey of the teaching of economics at UK Universities. The returns from this survey allow us to compare the quality of our teaching to that in other UK economics units.

10.20 **Matriculation**
All students must matriculate each academic session to allow them to continue with their studies and attend classes. Students are expected to matriculate during Orientation Week in the first semester. Students who do not are usually expected to pay a late matriculation fee. Students who do not are usually expected to pay a late matriculation fee. Please see [http://www.st-andrews.ac.uk/students/academic/advising/](http://www.st-andrews.ac.uk/students/academic/advising/) for further details.

10.21 **Recording Devices in Lectures**
If you have a disability or some medical condition which means that you are unable to take notes in lectures, you may seek permission from Student Services to use a voice recorder or other computer-based device to record lectures and/or tutorials. If you are not authorised by Student Services to record lectures then you must request permission from the relevant academic member of staff prior to the lecture taking place. More information is available at: [https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/recording-lectures.pdf](https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/recording-lectures.pdf)

10.22 **Termination of Studies on Academic Grounds - Undergraduates**
If your academic performance is unsatisfactory, i.e. you have gained insufficient credits to progress to the next stage of your degree programme, your studies may be terminated. You will then be notified by the Dean or the Pro Dean (Advising) that your studies are terminated and you will normally have no later than five working days within which to submit a request a review of this decision using an appropriate form. This should be supported by documentary evidence specifying the reasons for your unsatisfactory performance. If you do not submit a request for review of the decision you will have your studies automatically terminated. This decision is taken by the Dean in accordance with Senate Regulations. Your full student record is taken into account any review, including any instances of non-academic misconduct.

If your request for review is successful, the Dean will contact you with conditions for your return to studies. If you do not meet these conditions (e.g. you do not pass the specified amount of credits within the time period given by the Dean) your studies may be terminated again.
If your request for review is unsuccessful, you may have a further right of appeal to the Senate of the University. Appeals to Senate are admissible only on limited grounds and the process cannot be used to challenge matters of academic judgment. To make a Senate submission, you must complete and submit to the Senate Office a Stage 2 appeal form within 10 working days of the date stated on your termination letter. Late submissions may not be considered further by the University. For further information, see the University’s Policy on Student Academic Appeals at http://www.st-andrews.ac.uk/students/rules/appeals/policy/

International students here at St Andrews on a Tier 4 visa should be aware that any terminations will be reported to the UKVI and their visa curtailed.

**Contact**
Student Services, Students’ Association, 9 St Mary's Place
Telephone: 01334 462720
Email: studentservices@st-andrews.ac.uk

10.23 **Past Examination Papers**
These are available via iSaint
(see http://www.st-andrews.ac.uk/students/academic/Examinations/pastpapers/)
### Timetables

**University of St Andrews**  
**School of Economics and Finance**

**Timetable**  
Semester 1  Session 2014-15

<table>
<thead>
<tr>
<th>Time</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 am</td>
<td>EC3201</td>
<td>jy/mn</td>
<td>Irv Lec Th</td>
<td>EC3201</td>
<td>jy/mn</td>
</tr>
<tr>
<td></td>
<td>EC4201</td>
<td>os/ko</td>
<td>Sch II</td>
<td>EC4201</td>
<td>os/ko</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EC3201</td>
<td>jy/mn</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EC4201</td>
<td>os/ko</td>
</tr>
<tr>
<td>10 am</td>
<td></td>
<td></td>
<td>Is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 noon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 pm</td>
<td></td>
<td></td>
<td></td>
<td>EC4507</td>
<td>mcg/gg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bute Theatre A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EC4501</td>
<td>gss</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sch I</td>
<td></td>
</tr>
<tr>
<td>3 pm</td>
<td>EC4509</td>
<td>gff</td>
<td>Sch V</td>
<td>EC4509</td>
<td>gff</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sch V</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC4507</td>
<td>mcg/gg</td>
<td>Bute Theatre A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EC4501</td>
<td>gss</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sch I</td>
<td></td>
</tr>
<tr>
<td>4 pm</td>
<td>EC4520</td>
<td>tc</td>
<td>Sch I</td>
<td>EC4510/4205</td>
<td>Is/mn/sz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F2</td>
<td></td>
</tr>
<tr>
<td>5 pm</td>
<td>EC4520</td>
<td>tc</td>
<td>Sch I</td>
<td>EC4510/4205</td>
<td>Is/mn/sz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F2</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>MONDAY</td>
<td>TUESDAY</td>
<td>WEDNESDAY</td>
<td>THURSDAY</td>
<td>FRIDAY</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9 am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 am</td>
<td>EC3203 awt/rs Irvine Lecture Th</td>
<td>EC3203 awt/rs Irvine Lecture Th</td>
<td>EC3203 awt/rs Irvine Lecture Th</td>
<td>EC4203 gs/ls/du/jy/ahh Purdie Theatre D</td>
<td>EC4203 gs/ls/du/jy/ahh Purdie Theatre D</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 noon</td>
<td>EC4204 td Sch II</td>
<td></td>
<td>EC4204 td ARB115</td>
<td></td>
<td>EC4204 td ARB115</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 pm</td>
<td>EC4508 du Sch II</td>
<td>EC4512 is Sch I</td>
<td></td>
<td>EC4514 ahh School I</td>
<td>EC4514 ahh School I</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 pm</td>
<td>EC4508 du Sch II</td>
<td></td>
<td></td>
<td>EC4502 gss Sch V</td>
<td>EC4502 gss Sch V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 pm</td>
<td>EC4512 is Sch I</td>
<td>EC4519 gs ARB317</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EC4519 gs ARB317</td>
</tr>
</tbody>
</table>
12. Key Dates for your diary

<table>
<thead>
<tr>
<th>Date</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 30</td>
<td>EC4205-EC4510 Project</td>
</tr>
<tr>
<td>Oct 16</td>
<td>EC4202 Class Test 1</td>
</tr>
<tr>
<td>Oct 16</td>
<td>EC4507 Class Test 1</td>
</tr>
<tr>
<td>Oct 21</td>
<td>EC3201 Class Test</td>
</tr>
<tr>
<td>Oct 22</td>
<td>EC4201 Class Test 1</td>
</tr>
<tr>
<td>Oct 24</td>
<td>EC4501 Class Test 1</td>
</tr>
<tr>
<td>Oct 30</td>
<td>EC3202 Class Test 1</td>
</tr>
<tr>
<td>Nov 5</td>
<td>EC4205/EC4510 Essay due</td>
</tr>
<tr>
<td>Nov 10</td>
<td>EC4201 Class Test 2</td>
</tr>
<tr>
<td>Nov 12</td>
<td>EC4509 Essay due</td>
</tr>
<tr>
<td>Nov 14</td>
<td>EC4520 Essay due</td>
</tr>
<tr>
<td>Nov 17</td>
<td>EC3201 Essay due</td>
</tr>
<tr>
<td>Nov 21</td>
<td>EC4501 Class Test 2</td>
</tr>
<tr>
<td>Nov 20</td>
<td>EC4202 Class Test 2</td>
</tr>
<tr>
<td>Nov 20</td>
<td>EC4507 Class Test 2</td>
</tr>
<tr>
<td>Nov 21</td>
<td>EC3202 Class Test 2</td>
</tr>
<tr>
<td>Nov 24</td>
<td>EC4205/EC4510 Slides Due</td>
</tr>
<tr>
<td>Nov 26</td>
<td>EC4205/EC4510 Presentations</td>
</tr>
<tr>
<td>Dec 5</td>
<td>Submit Attendance Sheets Honours Level</td>
</tr>
<tr>
<td>Dec 8</td>
<td>Examinations Begin</td>
</tr>
</tbody>
</table>

Candlemas Semester 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 23</td>
<td>EC4512 Class Test 1</td>
</tr>
<tr>
<td>Mar 2</td>
<td>EC3203 Class Test</td>
</tr>
<tr>
<td>Mar 4</td>
<td>EC4508 Essay 1 due</td>
</tr>
<tr>
<td>Mar 6</td>
<td>EC4502 Class Test 1</td>
</tr>
<tr>
<td>Mar 12</td>
<td>EC4203 Short Essay due</td>
</tr>
<tr>
<td>Mar 13</td>
<td>EC4519 Essay due</td>
</tr>
<tr>
<td>Apr 1</td>
<td>EC4508 Essay 2 due</td>
</tr>
<tr>
<td>Apr 6</td>
<td>EC4512 Class Test 2</td>
</tr>
<tr>
<td>Apr 8</td>
<td>EC3203 Essay due</td>
</tr>
<tr>
<td>Apr 8</td>
<td>EC4204 Class Test</td>
</tr>
<tr>
<td>Apr 9</td>
<td>EC4300 Dissertation due</td>
</tr>
<tr>
<td>Apr 10</td>
<td>EC4502 Class Test 2</td>
</tr>
</tbody>
</table>

§ These dates were correct at the time of going to press, but you should regularly check the School notice board, the School website and your email for variations and additions. This Table is provided as a courtesy only - significant dates may be omitted, and alterations in dates listed above may become necessary.
13. University Dates:

Orientation week: Week commencing Monday 8 September 2014

- Martinmas Semester/Semester 1: Mon 15 Sept 2014 – Fri 19 Dec 2014
- Raisin Monday: 20 Oct 2014 (classes as normal)
- St Andrews Day Graduation: Mon 1 Dec 2014 (no teaching all day)
- Revision period: Commences Mon 1 Dec 2014
- Semester 1 Examination Diet: Mon 8 Dec – Thurs 18 Dec 2014
- Christmas Vacation: Sat 20 Dec 2014 – Fri 2 Jan 2015
- Inter-semester: Wed 7 Jan - Wed 21 Jan 2015
- Candlemas Semester/Semester 2: Mon 26 Jan – Fri 29 May 2015
- Spring Vacation: Sat 14 Mar – Sun 29 Mar 2015
- May Day Holiday (no classes): Mon 4 May 2015
- Revision period: Commences Mon 27 Apr 2015
- Semester 2 Examination Diet: Mon 11 May - Fri 22 May 2015
- Graduation Week: Mon 22 Jun – Fri 26 June 2015
- Re-assessment Diet: Week beginning Mon 17 Aug 2015

Orientation Week is an integral part of the University semester, and students are expected to devote this period to their studies. Students are also expected to be available for the entire examination period.

14. Key Contacts

Head of School: Professor Clara Ponsati
Office: TBA Email: econhos
Office Hours: by appointment Telephone: TBA

Deputy Head of School: Professor Paola Manzini
Office: G14E Email: pm210
Office Hours: Wed 12-1 pm & Thurs 2-3 pm Telephone: 2436

Director of Research: Professor Paola Manzini
Office: G14E Email: pm210
Office Hours: Wed 12-1 pm & Thurs 2-3 pm Telephone: 2436
School Office
Office: F1
Opening hours 9 am-1 pm & 2 pm–5 pm
Email: econsec
Telephone 2320

Director of Teaching: Dr Peter Macmillan
Office: G2W
Office Hours: Monday 3-5 pm
Email: econdot
Telephone: 2433

Deputy Director of Teaching: Dr Geetha Selvaretnam
Office: F9
Office Hours: Thurs 3-4 pm
Email: gs51
Telephone: 1956

School Examinations Officer: Dr Jim Jin
Office: F16
Office Hours: Tues/Thurs 3-4 pm
Email: jyj
Telephone: 2447

Year Abroad Co-ordinator: Dr Jim Jin
Office: F16
Office Hours: Tues/Thurs 3-4 pm
Email: jyj
Telephone: 2447

School Administrator: Liz Pert-Davies
Office: G4aW
Office Hours: Mornings only (Mon-Fri)
E-mail: econadmin
Telephone: 2398

Disabilities Coordinator: Liz Pert-Davies
Office: G4aW
Office Hours: Mornings only (Mon-Fri)
E-mail: econadmin
Telephone: 2398

School Academic Misconduct Officer: Dr Manfredi La Manna
Office: G16E
Office Hours: Mon 8.30-9.00 am
Email: mlm
Telephone: 2434

Senior Honours Adviser: Dr Peter Macmillan
Office: G2W
Office Hours: Monday 3-5 pm
Email: econdot
Telephone: 2433
15. Teaching Staff and Research Interests

Professor M Costa-Gomes (Game theory as part of empirical economics; Experimental economics; Behavioural economics; Bounded rationality)

Professor G Evans (Expectations and learning dynamics in macroeconomics; Design of monetary and fiscal policy under learning; Deflation traps and macroeconomic policy in severe recessions; Asset price dynamics, bubbles, and near-rational exuberance; Expectational stability and business cycle fluctuations)

Professor A Hughes-Hallett (Open Economy Macroeconomics; Policy Coordination; Monetary Integration; Political Economy Models; Fiscal Policy; Regionalism, The Theory of Economic Policy; Dynamic Games; Council of Economic Advisors to the Scottish Government)

Professor P Manzini (Bounded rationality, choice and decision theory, axiomatic methods in individual and collective choice, bargaining theory and game theory)

Professor J R McCrorie (Econometrics (theoretical and applied) and Time Series Analysis)

Professor K Mitra (Expectations and Learning Dynamics in Macroeconomics; Design of Monetary and Fiscal Policy)

Professor C Ponsati (Game Theory, Bargaining and Conflict Resolution)

Professor A Sutherland (Macroeconomics and international economics)

Professor D Ulph (Enforcement of Competition and Regulation Policy; Design of Social Benefit Systems; Consumer Behaviour in a Social context; Tax Compliance – Theory and Policy; Economics of Innovation, Economics of Climate Change, Director of Scottish Institute for Research in Economics)

Dr M A La Manna, Reader (Industrial Organization (especially oligopoly theory, economics of R&D, Research Joint Ventures, and patents), Economics of Optimal Organization, microeconomics of menu costs, Economics of regulation)

Dr G Shea, Reader (Financial Economics, Economic History)

Dr J Y Jin, Senior Lecturer (Industrial Economics and Comparative Economics, including firm/industry study, market performance, competition policy and country comparison)

Dr O Senay, Senior Lecturer (Open Economy Macroeconomics; Monetary Economics; Dynamic general equilibrium models with imperfect competition and nominal rigidities in understanding macroeconomic policy questions; Exchange rate regime choice)

Dr I Smith, Senior Lecturer (Economics of Household Behaviour; Economics of Religion; Law and Economics)
Dr L Barbopoulos, Lecturer (Time Series Econometrics, Asset Pricing, Corporate Finance, Foreign Direct Investments (FDI), and Mergers & Acquisitions (M & A))

Dr T Cuhadaroglu, Lecturer (Decision Theory, Bounded Rationality, Behavioural Economics, Inequality, Welfare Economics)

Dr T Diasakos, Lecturer (Economic Theory, Mathematical Economics, Bounded Rationality, Financial Economics)

Dr F Di Pace, Lecturer (Macroeconomics, Monetary Economics and Labour Market Dynamics).

Dr G Forgues-Puccio, Lecturer (Economic Growth and Development; Corruption and Governance; Inequality and Income Distribution)

Dr G Gerasimou, Lecturer (Choice Theory, Bounded Rationality)

Dr T Koutmeridis, Lecturer (Macroeconomics, Labour Economics, Applied Econometrics, including inequality, growth, human capital, financial constraints, discrimination, crime)

Dr P D Macmillan, Lecturer (EMU; Term Structure of Interest Rates)

Dr I Merkurieva, Lecturer (Labour Economics, Public Economics, Retirement, Search Theory, Life Cycle Modelling, Numerical Methods)

Dr M Negri, Lecturer (Political Economics, Game Theory, Microeconomics)

Dr A Nichifor, Lecturer (Game Theory: Market Design - matching markets, networks and auctions -, Social Choice - ranking)

Dr M K Ozbek, Lecturer (Choice and Decision Theory, Mechanism Design, Bounded Rationality, Experimental Economics)

Dr R Stefanski, Lecturer (Growth and Development, Structural Transformation, International Trade, Natural Resource Economics, Environmental Economics)

Dr L Savorelli, Lecturer (patent design, internationalization of R&D activities; theory of industrial organization, competition, network externalities; health economics (eating behavior, social pressure, smoking and eating); third sector and non-profit organizations)

Dr G Selvaretnam, Lecturer (Economics of Banking, Environment and Development)

Dr A Trew, Lecturer (Economic Growth, Institutions, Financial Development)

Dr S Zhang, Lecturer (Macroeconomics and Labour Economics)

Mr P Egan, Teaching Fellow (Macroeconomics, International Economics, Monetary Policy & Macroeconomic Dynamics in China, Chinese Economic Development & Reform)
Miss M Mitka, Teaching Fellow (International macroeconomics and trade, International policy coordination)