

# 2014 - 2015

## Honours Level Module Catalogue



University of  
St Andrews  
FOUNDED  
1413

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### Introduction to the Honours Level Module Catalogue

The main body of the Catalogue is presented in Sections relating to the Academic Schools in the University. In addition, there is also a section for Interdisciplinary Modules (section 22).

### Explanation of Fields in Module Entries

**Module number and Title.** Self explanatory - module numbers are unique. The third character indicates the module level.

**Academic Year.** The academic **session** (whether current or planned) in which the module will be offered.

**SCOTCAT Credits.** Credits are the number of points a specific module contributes towards a recognised degree programme and are grouped according to the **level** of academic content in the module. A student's studies towards a degree will be structured in terms of modules, each of which is assigned a credit value; so, for example, 1000-level modules in the School of Art History are worth 20 credits. One credit represents the outcome achievable by the average student through 10 notional hours of learner effort. In practice, one full-time undergraduate year is considered to be 120 credits worth of learning (or 1,200 notional hours of learning).

**SCQF Level.** The **Scottish Credit and Qualifications Framework (SCQF)** Levels provide an indication of the complexity of qualifications and learning programmes and are based on a single set of Level Descriptors that are the common reference points and definitions which provide a way of recognising learning that is outcome-based and quality-assured. 1000 level = SCQF 7, 2000 level = SCQF 8, 3000 level = SCQF 9, 4000 level = SCQF 10, 5000 level = SCQF 11.

**Semester(s).** The Semester or Semesters in which the module is taught, where 'either' means that the module is taught in both one or the other semesters, 'both' means being offered twice, and 'whole year' means that it is taught across the two semesters. The St Andrews teaching year has two semesters (September - December, and January - May).

**Availability Restrictions.** If a module is available but with constraints, these particular restrictions will be clarified in this field.

**Planned Timetable.** Most 1000- and 2000-level modules are taught at a set hour, for one hour, although additional tutorial times and practical times may need to be arranged. If days of the week are not specified, the class meets every day from Monday to Friday, with the usual exception of Wednesday afternoons.

**Description.** This is a brief statement of the content of a module.

**Pre-requisite(s).** Modules or qualifications which must be passed prior to taking a given module. Second semester modules and 2000-level or above modules may have pre-requisites reflecting the assumption that they build upon previous knowledge gained. So, for example, the pre-requisite for entry to 2000-level modules in French is a pass in either or both of the 1000-level modules. In the case of certain modules, largely 1000 level, pre-requisites may be framed in terms of specified passes at Higher or A-level. The Head of the relevant School has the authority to waive a pre-requisite. Where the pre-requisite is not simply a pass in another module but includes a grade (eg, '11 or better') the number refers to the 20-point reporting scale.

**Co-requisite(s).** A module which must be taken in the same **semester** or academic session as the one listed.

**Anti-requisite(s).** Students may **not** take a module if they have already passed or are currently taking any module or other qualification specified as an anti-requisite to it.

**Required for.** This field indicates that a module is required to be passed as a pre-requisite to entry to another module.

**Programme module type.** This indicates how the module fits into various programmes of study and whether it is compulsory or optional.

**Learning and Teaching Methods and Delivery.** This gives an indication of the anticipated **Weekly Contact** time with academic staff and the formal breakdown of **Scheduled Learning/Guided Independent Study** as defined by the Quality Assurance Agency (QAA).

## Introduction – Honours Level 2014/15 – August 2014

**Weekly Contact.** This is an indication of the weekly teaching provision for each student. The normal teaching period will be of one hour unless indicated otherwise. Where the pattern of teaching varies from week to week, **the average weekly contact is given.**

**Tutorial.** This is a discussion class of typically ten or fewer students.

**Seminar.** This is typically a group larger than ten, and may also involve student presentations and contributions as well as discussion.

**Scheduled Learning** - time spent with an academic member of staff.

**Guided Independent Study** - time which a student is expected to undertake alone but often under direction.

**Assessment pattern.** This is a brief description of the distribution between coursework and formal examination. A percentage breakdown of which elements of assessment qualify in each Quality Assurance Agency (QAA) defined category are also given. These may match the narrative description ("As used by St Andrews"), or they may differ slightly because some elements of Coursework (Class Tests for example) can be considered Written Examinations in a QAA context.

**Module Co-ordinator.** The academic member of staff responsible for this module, or the contact point for further information.

**Lecturer(s)/Tutor(s).** One or more academic members of staff who are planned to deliver the content of the module.

**Undergraduate Resolutions and Regulations: Session 2014/15**

The Regulations are undergoing revision and will be available in September at:

[www.st-andrews.ac.uk/students/rules/ugsenateregulations/](http://www.st-andrews.ac.uk/students/rules/ugsenateregulations/)



## School of Art History

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Art History (AH) modules

AH3104 The Age of Klimt, Olbrich and Mucha			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Mon (lecture), and either 10.00 am or 11.00 am Wed (seminar)		
<p>This module analyses the development of the central European variations of Art Nouveau known as the Secession Style. Focusing on the Austro-Hungarian empire (in particular the cities of Vienna, Budapest, Prague and Cracow), it examines the new art, architecture and design with regard to its aims and themes. Emphasis is placed on the relationship between the artistic search for cultural identity, the state and contemporary society. Issues of nationalism and supranationalism will be analysed in the course of studying the work of the Vienna Secession and Wiener Werkstätte, the Gödöllo colony, the Mánes and Sztuka societies. Major figures include Klimt, Wagner, Hoffmann, Olbrich, Lechner, Mucha, Rippl-Rónai and Wyspianski.</p>			
<b>Programme module type:</b>	Optional for Art History		
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks), 2 x tutor's office hour (x 12 weeks), field trip - 8 hours		
	<b>Scheduled learning:</b> 65 hours	<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr J Howard		
<b>Lecturer(s)/Tutor(s):</b>	Dr J Howard		

## Art History - Honours Level - 2014/15 - August 2014

AH3122 The British Country House (1650 - 1800)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00am - 12 noon Fri (lecture) and either 2.00pm or 3.00pm Fri (seminar)			
<p>This module will cover the architecture and history of the country house in Great Britain from shortly before the restoration of the monarch in 1660 to the close of the earlier stages of Neo-Classicism in the years around 1800. The leading emphasis will be on the architectural forms that were given to country houses built over the 150 years to be covered. But within this context consideration will be given to how the houses both reflected and orchestrated the way of life they were intended to accommodate, to the range of ways in which they might be fitted out internally, and to the landscape setting within which they were located. The economics of construction and landscaping will be briefly considered. The Scottish country house will be given full weight, and it is intended that visits will be paid to a number of houses.</p>				
<b>Programme module type:</b>	Optional module for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof R Fawcett			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Fawcett			

AH4076 Rubens and Rembrandt: Parallel Worlds				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 1.00 am Mon (lecture) and either 3.00pm Mon or 3.00 pm Tue (seminar)			
<p>This module examines seventeenth century Netherlandish art with reference to the careers and works of Peter Paul Rubens (1577-1640) and Rembrandt Harmenzoon van Rijn (1606-69). The contrasting oeuvres of Rubens and Rembrandt - the most important exponents of Baroque painting north of the Alps - will be considered from a thematic rather than a chronological point of view. Rubens's religious, mythological, political-allegorical, portrait and landscape works, and Rembrandt's representation of subjects from the Old Testament, the New Testament, mythology and topography, as well as his portraiture (including self-portraiture), will be major foci.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr J Luxford			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Luxford			



<b>AH4081 The Scandinavian Art of Building and Design 1890-1960</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	1.00 pm – 3.00pm Tue (lecture) and either 9.00 am or 10.00 am Wed (seminar)			
<p>This module offers an examination of aspects of Scandinavian architecture and design between 1890-1960. Focusing on selected developments in Denmark, Sweden, Norway and Finland, it also highlights the significant relationship to German design theory and practice of the period. Beginning with a consideration of the legacy of National Romanticism, the module moves on to explore architectural Expressionism, Nordic Classicism, and Scandinavia's unique form of architectural modernism known as Functionalism or the Scandinavian synthesis. Examination of individual buildings and civic planning is combined with a focus on the importance of integrated design: furniture, fittings, household utensils, the relationship to the environment etc. Individuals studied include Martin Nyrop, Ragnar Ostberg, Eliel Saarinen, Kay Fisker, Alvar Aalto and Arne Jacobsen.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour tutorial (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr S Kallestrup			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Kallestrup			

## Art History - Honours Level - 2014/15 - August 2014

AH4097 60-Credit Honours Dissertation in Art History			
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	As arranged with Supervisor and Honours Adviser		
The dissertation will be valued at 60 credits and completed over two semesters. It will be c. 12,000 words in length. Topics must be capable of being supervised by the School's established staff and each student will (a) be assigned a supervisor, who will be available to discuss issues related to the dissertation throughout both semesters, and (b) be required to attend one general lecture on research and at least one 50-minute supervisory meeting per semester. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a> )			
<b>Programme module type:</b>	Either AH4097 or AH4099 is compulsory for Single Honours Art History. Optional for Joint Honours Art History		
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.		
<b>Anti-requisite(s):</b>	AH4099		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> During the semester, in total there will be 1 x 1-hour briefing seminar; 1 x 1-hour pre-supervisory meeting; 1 x 1-hour dissertation writing seminar; 2 x 1-hour supervisory meetings; 1 x 2-hour presentation seminar; 1 x 1-hour review meeting.		
	<b>Scheduled learning:</b> 8 hours	<b>Guided independent study:</b> 592 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Dissertation = 100%		
<b>Module Co-ordinator:</b>	Dr T Normand		
<b>Lecturer(s)/Tutor(s):</b>	Team taught		

<b>AH4099 30-Credit Dissertation in Art History</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1 or 2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	As arranged with Supervisor and Honours Adviser		
<p>The dissertation will be valued at 30 credits and completed over one semester. It will be c. 6,000 words in length. Topics must be capable of being supervised by the School's established staff and each student will (a) be assigned a supervisor, who will be available to discuss issues related to the dissertation throughout the semester, and (b) be required to attend one general lecture on research and at least one 50-minute supervisory meeting.</p> <p>(Guidelines for printing and binding dissertations can be found at:  <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>			
<b>Programme module type:</b>	Either AH4097 or AH4099 is compulsory for Single Honours Art History. Optional for Joint Honours Art History		
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.		
<b>Anti-requisite(s):</b>	AH4097		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> During the semester, in total there will be 1 x 1-hour briefing seminar; 1 x 1-hour pre-supervisory meeting; 1 x 1-hour dissertation writing seminar; 2 x 1-hour supervisory meetings; 1 x 2-hour presentation seminar; 1 x 1-hour review meeting.		
	<b>Scheduled learning:</b> 8 hours	<b>Guided independent study:</b> 292 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Dissertation = 100%		
<b>Module Co-ordinator:</b>	Dr T Normand		
<b>Lecturer(s)/Tutor(s):</b>	Team taught		

## Art History - Honours Level - 2014/15 - August 2014

AH4107 Wyndham Lewis and the Politics of Modernism				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue (lecture), and either 11.00 am or 12.00 noon Fri (seminar)			
This module aims to examine the complex historical processes which shaped English art in the first four decades of the twentieth century. It will relate artistic change to broader social, political and cultural developments. The module will focus on the key developments in English avant-gardism in the period circa 1913, and on the emergence of a second avant-garde in the 1930s. A central figure in the module will be Wyndham Lewis whose career allows us to concentrate on important themes in critical and aesthetic theory.				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr T Normand			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Normand			

AH4108 Post-war Scottish Art 1950-present				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue (lecture), and either 11.00 am or 12.00 noon Fri (seminar)			
This module will explore subjects, issues, and themes in recent Scottish art. From an analysis of post-war abstraction, it will proceed to be a close study of the renaissance of figurative painting during the 1980s. Subsequent developments in Conceptualism, in the 1990s, will be examined in depth while the whole will be set inside the critical debates of modernism and post-modernism in the contemporary period.				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr T Normand			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Normand			

<b>AH4130 Realism and Symbolism in Russian Art 1860 - 1910</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Tue (lecture) and either 9.00 am or 10.00 am Wed (seminar)			
<p>This module examines the development of Russian art from the appearance of 'romantic realism' in the 1820s, through that of 'critical realism' in the mid-nineteenth century to the introduction of symbolist values around 1900. Special emphasis is laid on the relationship of the Academy with the exponents of the new trends. Accepted interpretations will be scrutinised with the various movements and individuals (such as Repin, Surikov, Perov, Vasnetsov, Levitan, Kramskoy, Nesterov and Serov) being studied in relation to social and political demands, patronage, aesthetic theories and the continuing tensions between 'native' traditions and 'western' ideas.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Howard			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Howard			

<b>AH4147 Classicism in Western Art: The Legacy of Greece and Rome</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Tue (lecture) and either 9.00 am or 10.00 am Wed (seminar)			
<p>This module examines the role of Greek and Roman civilisation in shaping the arts and ideas of western culture. The topics expand from the Middle Ages to the present day, effectively spanning the main period divisions of art history. Broadly oriented geographically and chronologically, the module considers definitions of the classical, permutations and appropriations of classical forms and ideals, as well as changing attitudes to the classical past. The classical inheritance in terms of both style and iconography is examined in a variety of selected studies drawn from across Europe, focusing mainly on sculpture and painting.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar (x 11 weeks), 2 x tutor's office hour (x 12 weeks), field trip – 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr L Kouneni			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Kouneni			

## Art History - Honours Level - 2014/15 - August 2014

AH4157 The Age of Vermeer: Dutch Genre Painting in the Seventeenth Century				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Mon (lecture) and either 9.00 am or 11.00 am Tue (seminar)			
<p>This module offers an in-depth exploration of the nature and interpretation of seventeenth-century Dutch genre painting by such artists as Vermeer, Steen, De Hooch and Metsu. Alongside the social, cultural and historical context, we shall address different art-historical methodologies and approaches such as the study of meaning, realism, ideology, national identity, patronage, display, reception and the art market. We shall assess the emblematic/iconological approaches and the reactions against this method of interpretation; the aspects of realism, optics and the descriptive nature of Dutch art; and the hyper-realism and aesthetics of the Leiden 'fijnschilders'.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour tutorial (x 11 weeks), 2 x tutor's office hour (x 12 weeks), field trip – 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr S Oosterwijk			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Oosterwijk			

AH4163 Approaches to Modern Sculpture				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Tue and 10.00 am Wed (lectures) and either 11.00 am or 12.00 noon Fri (seminar)			
<p>The term 'modern sculpture' might be considered something of a misnomer, because sculpture has frequently been considered the art least well equipped to respond to the pressures of contemporary experience. Yet modernized it was, and during the course of the past 150 years sculpture has undergone an unprecedented number of mutations and reincarnations. This module will explore some of the key attempts to define the hybrid nature of this recalcitrant medium, which we shall be discussing in conjunction with select histories of particular works from the nineteenth century to the present. What expectations has the category of sculpture been asked to fulfil? What critical value is there in continuing to treat this art form as a worthwhile subject of study? And will sculpture remain a relevant reference-point for twenty-first century art practice, or will it quietly expire? Should we attempt resuscitation, or advocate euthanasia? This module will search for some provisional answers.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr A Rider			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Rider			

AH4175 Luxury Goods in the Middle Ages				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Thu (lecture) and either 12 noon or 1.00 pm Fri (seminar)			
<p>In the wake of the Black Death and the upheaval it caused, a new social order formed. Seaports in Italy, France, the Netherlands, and Britain flourished as merchants began trading in luxury goods. In doing so, they developed global markets, and they helped to stimulate a new economy based on trade rather than birthright. Although the courts of Europe had always commissioned great works of art and the accoutrements of a rich life, the nouveaux riches of towns such as Paris and Bruges, many of whom were involved in this new economy as traders, began consuming exotic goods and works of art.</p> <p>This module considers the economic background to sweeping changes in the late middle ages; to a new distribution of wealth; and to the development new trade routes that brought raw materials and finished luxury items from Asia, Africa, the Baltic, and beyond. We will consider many of what have been called 'minor arts', including automata and mechanical marvels developed in late medieval courts, as well as many surviving paintings commissioned by the nouveaux riches, which often depict the kinds of consumer goods they were also purchasing. We will examine the propositions that images both constructed and reflected identity, and that they both revealed and stimulated a desire for exotic products. While some of our readings will address Italy, we will focus attention on France, the Netherlands, and the British Isles.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks), 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours.			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Rudy			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Rudy			

AH4201 British Design and Decorative Art (1750 - 1915)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu (lecture) and either 3.00 pm or 4.00 pm Thu (seminar)			
<p>Surveying 165 years of design and decorative arts, the module focuses on the major design movements. This was a period of great change, when production increasingly moved from small workshops to factories, though the timing of this transformation varied in different crafts. The module looks at the history of style, the development of production techniques, the dissemination of ideas and fashions, and the changing role of the consumer of designed goods.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Ms A Carruthers			
<b>Lecturer(s)/Tutor(s):</b>	Ms A Carruthers			

## Art History - Honours Level - 2014/15 - August 2014

AH4205 Byzantium, 330 - 1453: Art, Religion and Imperial Power			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed (lecture) and either 10.00 am or 11.00 am Thu (seminar)		
<p>This module explores the vibrant visual culture of the Byzantine Empire from the founding of Constantinople in 330 AD to the fifteenth century when the imperial capital succumbed to the might of the Ottoman Turks. It is an exciting period which sees the formation of a distinct Christian art and architecture drawing upon the religious traditions of Judaism and pagan Rome on one hand, and that of imperial power on the other. We will examine a wide range of media (mosaics, frescoes, icons, ivories and luxury objects) in order to gain a rounded view of the art of the Byzantine Empire and we will consider the function of images and objects in specific historical contexts. We will explore the grandeur of Hagia Sophia in Instabul, the mosaics in Constantinople, Ravenna and San Marco in Venice, the extraordinary skills of ivory workers, enamellists and illuminators of manuscripts, and we will relate these treasures to the social, cultural and religious dimensions of this dynamic culture.</p> <p>Particular emphasis will be placed on the theory and function of icons or holy images, the use of art to project imperial ideology, the relationship between art and ritual and the appropriation of Byzantine forms and iconography for ideological purposes outside the empire.</p>			
<b>Programme module type:</b>	Optional for Art History		
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours		
	<b>Scheduled learning:</b> 65 hours	<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%		
<b>Module Co-ordinator:</b>	Dr L Kouneni		
<b>Lecturer(s)/Tutor(s):</b>	Dr L Kouneni		



<b>AH4207 Receptions of Venetian Painting 1600 - 1800</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	3.00 - 5.00 pm Thu (lecture) and either 12.00 noon or 2.00 pm Fri (seminar)			
	<p>The sixteenth century is known as the 'golden age' of Venetian painting. It produced some of the finest art of the Western tradition, made by artists such as Giovanni Bellini, Giorgione, Titian, Pordenone, Tintoretto and Veronese. Yet, a 'golden age' is only born after the fact, and this module will define the legacy of sixteenth-century Venetian painting into the nineteenth century. Starting with the artistic reception of the Venetian Cinquecento by such renowned artists as Rubens, Rembrandt, Tiepolo and Reynolds, we will cover topics as wide-ranging as private collecting, print-making, artistic theory, early art museums, the rise of connoisseurship, theft and looting. We will examine current theories of reception as well as an abundance of period sources. Eventually, we will develop an understanding of one of the distinctive features of artworks in general: remaining when their makers have long passed, they take on ever new meanings and functions.</p>			
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr E van Kessel			
<b>Lecturer(s)/Tutor(s):</b>	Dr E van Kessel			

<b>AH4208 The Portrait in Western Art</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu (lecture) and either 3.00 pm or 4.00 pm Thu (seminar)			
	<p>Studying portraiture means studying representations of human faces. Most of the time, these are faces of people who lived long ago, and their portraits give us access to the way they looked, as well as the way they wanted to represent themselves to society. Yet portraits are also often highly complex constructions designed by major artists; as Leonardo had it, "every painter paints himself". So what exactly is it that a portrait portrays? Why did people commission their portraits, and what were they used for? What knowledge did people bring to looking at portraits? What did it mean for an artist to paint or sculpt a 'true likeness'? With a focus on the early modern period, yet including some excursions to both earlier and later periods, this module will address the above questions and more, approaching portraiture from a wide range of perspectives as well as focusing on some of the major practitioners and commissioners of the genre.</p>			
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E van Kessel			
<b>Lecturer(s)/Tutor(s):</b>	Dr E van Kessel			

## Art History - Honours Level - 2014/15 - August 2014

AH4212 Cultures of Collection and Display ca. 1851 to the Present Day			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu (lecture) and either 1.00 pm or 3.00 pm Thu (seminar)		
<p>This module focuses on the collection and display of art from the mid-nineteenth century to the present day. Following an introduction to the museum from Early Modern cabinets of curiosities to the rise of the public museum, topics will include exhibiting cultures at World's Fairs, the history and theory of the modern art museum, private collectors and their agendas, artists' interventions into gallery spaces, museums and globalization, and the display of art in alternative spaces. Famous collectors such as the Rockerfellers, Alfred Barnes, Peggy Guggenheim, and Charles Saatchi will be considered, and questions to be asked include: What has been the relationship between display and the history of modern art? What role have collectors played in the international art market? How should "primitive" art and artefacts be collected and displayed? What major ethical issues face art museums today? The module will be delivered through a combination of formal lectures, seminars, and group visits to galleries and exhibitions. Students are expected to frequent and critique exhibitions as part of their learning, and to maintain a learning journal.</p>			
<b>Programme module type:</b>	Optional for Art History		
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours		
	<b>Scheduled learning:</b> 65 hours	<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr K Brown		
<b>Lecturer(s)/Tutor(s):</b>	Dr K Brown		

AH4213 Dada and Surrealism				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon (lecture) and either 9.00 am or 10.00 am Wed (seminar)			
<p>This module offers a broad survey of Dada and Surrealism, the two hugely influential international art movements of the interwar years (1916-1939). Emphasising the important links between the movements, it also examines essential differences through analysis of their philosophical, ideological and political positions. Key figures such as Duchamp, Arp, Picabia, Tzara, Hausmann, Breton, Ernst, Masson, Miro, Dalí, Man Ray, Oppenheim and Buñuel will be examined in some detail. A range of Dadaist and Surrealist practices will be considered, from literary texts to 'found' objects, ready-mades, performance, automatism in writing and painting, collage, film, photography and the 'dream' painting. This will provide the starting point for wider critical reflection on thematic issues including 'anti-art', cultural politics, psychoanalysis, the machine and gender.</p> <p>The module will be delivered through a combination of formal lectures and smaller group seminars. It will incorporate a class trip to Edinburgh to study the special collections of the Dean Gallery and Heath Fine Art's Phenotype Genotype (PhG) exhibition in Summerhall.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination - 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr S Kallestrup			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Kallestrup			

AH4214 Body / Politics: Performance Art Since 1960				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Mon (lecture), 10.00 am or 11.00 am Tue (seminar)			
<p>This module considers the centrality of body politics within the emergence of performance art from the 1960s to the present, exploring how a range of practitioners from North America, Latin America and Europe have addressed the issues of gender, labour, protest, emigration, conflict, participation, spectacle and institutionalisation in their work. We will address the socio-cultural and political motivations that fuelled these artists' treatment of the body and the understanding of group space and collaboration elaborated by their work, from Cold War conflicts and US imperialism, to Civil Rights protests, student activism, the advent of feminism, globalization and experiences of exile and migration.</p>				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures, 1 x 1-hour seminar (x 10 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 4 hours			
	<b>Scheduled learning:</b> 58 hours		<b>Guided independent study:</b> 242 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Spencer			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Spencer			

## Art History - Honours Level - 2014/15 - August 2014

AH4215 Contemporary Art and the Ethics of Fieldwork			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed (lecture), 11.00 am or 3.00 pm Thu (seminar)		
<p>The module thinks critically about the ways in which contemporary artists working during the past three decades have repeatedly approached their practice as a form of 'fieldwork' that takes place beyond the walls of studio or gallery, drawing on social science disciplines such as anthropology and ethnography as they do so. We will explore how artists have adopted the role of the fieldworker to achieve formal innovation – by using interviews, surveys, research, and documentary processes – and at a conceptual level to address globalisation, neo-colonialism, ecology, and gender politics, and to develop social art practices that ostensibly aspire to intervene in particular communities. We will analyse how artists working in film and photography, together with social art practice, community-based work, and performance have been particularly drawn to the social sciences, considering the problematic as well as generative aspects of this overlap. While focussing on contemporary art, the module looks back to the complex histories of artistic overlap with anthropology and ethnography, and the way in which these have been continued and confronted in recent curatorial and display strategies.</p>			
<b>Programme module type:</b>	Optional for Art History		
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures, 1 x 1-hour seminar (x 10 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 4 hours		
	<b>Scheduled learning:</b> 56 hours	<b>Guided independent study:</b> 244 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr C Spencer		
<b>Lecturer(s)/Tutor(s):</b>	Dr C Spencer		

AH4216 Mediaeval Islamic Painting				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon - 2.00 pm Fri (lecture) and either 11.00 am or 3.00 pm or 4.00 pm Fri (seminar)			
The module surveys Islamic painting (mosaics, frescoes, pottery and especially the arts of the book) between c.700 and c.1500 in the Arab and Persian worlds. Major themes to be explored include the interplay between Islamic and classical (including Byzantine) art; the development of the sacred book - the Qur'an - by means of script and illumination; the vexed question of Islamic iconoclasm; the role of pottery as a vehicle for courtly and popular figural art; the evolution of the frontispiece; and the infiltration of ideas from Europe and especially China into Islamic painting. Students will encounter such texts as the <i>Assemblies</i> of al-Hariri, the <i>Quintet</i> of Nizami and Firdausi's <i>Book of Kings</i> , and will study the interplay of text and image, of iconographic cycles and narrative techniques and how the so-called "classical style" in Persian painting emerged.				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures, 1 x 1-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours			
	<b>Scheduled learning:</b> 65 hours		<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Prof R Hillenbrand			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Hillenbrand			

AH4217 Childhood in Western Art: Image and Interpretation (SUBJECT TO APPROVAL)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Tue (lecture) and either 9.00 am or 10.00 am Fri (seminar)			
Is childhood a natural phenomenon or was it a concept 'invented' by society? This question is still fiercely debated among historians, who often cite works of art in evidence. Yet reading art is a skill: art has to be put into context and artistic conventions have to be recognised. In this module we shall be looking at and debating works of art alongside material culture to obtain a better understanding of childhood in the past.				
<b>Programme module type:</b>	Optional for Art History			
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 10 weeks), 1 x 1-hour seminar (x 11 weeks) 2 fieldtrip - 4hours			
	<b>Scheduled learning:</b> 36 hours		<b>Guided independent study:</b> 274 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S Oosterwijk			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Oosterwijk			

## Art History - Honours Level - 2014/15 - August 2014

AH4230 Approaches to Art History			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	11.00 am - 12.30 pm Mon (lecture) and either 3.30 pm - 5.00 pm Mon or 11.00 am - 12.30 pm Wed (seminar)		
This 30-credit module provides an introduction to the most significant critical approaches employed in Art History. It is designed to encourage students to consider new ways in which they might think about art, society and culture. Themes range from aesthetics, semiotics, psychoanalysis, feminism and phenomenology, to connoisseurship and iconography.			
<b>Programme module type:</b>	Compulsory for Single Honours Art History. Optional for Joint Honours Art History.		
<b>Pre-requisite(s):</b>	AH2001 and AH2002 - with passes at grade 11 or better in both.		
<b>Anti-requisite(s):</b>	AH3130		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1.5-hour lecture, 1 x 1.5-hour seminar (x 11 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 8 hours		
	<b>Scheduled learning:</b> 65 hours	<b>Guided independent study:</b> 235 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr J Luxford and Dr L Gartlan		
<b>Lecturer(s)/Tutor(s):</b>	Dr J Luxford and Dr L Gartlan		

## School of Biology

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Biology (BL) modules

<b>BL3000 Field Course</b>			
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	1-week residential course in summer vacation normally just prior to Orientation week.		
This module involves field-based exercises in a range of aquatic and/or terrestrial habitats. Students will examine and measure biodiversity, ecophysiological adaptation, and community structure, with both plant and animal material. Class exercises are used to develop good sampling techniques and to generate and analyse large data sets. Students also work in small project groups to develop individual skills in experimental design, practical manipulations, time-management and personal initiative, and in verbal/written presentation of project results.			
<b>Programme module type:</b>	Compulsory for Ecology and Conservation, Marine Biology, and Zoology. If BL3308 or BL3309 is taken then compulsory for all Biology degree programmes. Optional for Behavioural Biology, Biology and Geology, Biology, Biology and Economics, Biology and Mathematics or Statistics, Biology with French/Arabic, Biology and/or with Psychology, Biology and Geography, Evolutionary Biology, Sustainable Development.		
<b>Pre-requisite(s):</b>	Normally BL2105 or BL2106	<b>Anti-requisite(s):</b>	BL3321, BL3322
<b>Co-requisite(s):</b>	BL3308 or BL3309		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6-day field course, 8-hours per day		
	<b>Scheduled learning:</b> 48 hours	<b>Guided independent study:</b> 52 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Prof D Paterson		
<b>Lecturer(s)/Tutor(s):</b>	Prof D Paterson, Dr A Blight, Dr R Aspden Dr Shuker, Dr J Graves, Dr Defew, Dr Gollety		

## Biology - Honours Level 2014/15 - August 2014

<b>BL3301 Protein Structure and Function</b>			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	Lectures: 9.00 am Mon, Tue and Wed Practicals: to be arranged.		
<p>This module builds on the material covered in BL1201 and BL2104 to provide an understanding of more advanced aspects of protein structure and enzymology. The module begins by considering the protein-folding problem. The energetics of protein folding and the dependence of structure on sequence are examined. Protein folding diseases like spongiform encephalopathies are used as examples to highlight the significance of protein folding. The molecular basis of prion diseases is discussed in detail. The second part of the module focuses on the mechanisms of enzymes. This in turn leads into the phenomena of allosteric regulation, signalling cascades and transporter systems and is followed by a consideration of enzymes as pharmacological targets. The third part of the module introduces the major techniques for protein structure determination that are at the heart of modern biochemistry, molecular biology and drug discovery. Strategies for obtaining three-dimensional images of macromolecules by electron microscopy, X-ray crystallography and nuclear magnetic resonance are discussed. The laboratory course associated with this module introduces the fundamentals of safe laboratory practice. It provides grounding in the basic laboratory techniques, including associated calculations, as well as those associated with the study of proteins and enzymes.</p>			
<b>Programme module type:</b>	Compulsory for Biochemistry, Biomolecular Science, Molecular Biology. Optional for Cell Biology, Behavioural Biology, Biology, Neuroscience, and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	BL2101 or BL2104	<b>Required for:</b>	BL4212, BL4215, BL4223
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 2 x 6-hour practicals, split over several days, during the semester.		
	<b>Scheduled learning:</b> 45 hours	<b>Guided independent study:</b> 155 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 83%, Practical Examinations = 0%, Coursework = 17%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Dr U Schwarz-Linek		
<b>Lecturer(s)/Tutor(s):</b>	Dr U Schwarz-Linek, Dr J Nairn, Prof T Smith		



BL3302 Gene Regulation			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	Lectures: 10.00 noon Mon, Tue and Wed Practicals: to be arranged.		
<p>This module builds on material covered in BL1201 Molecular Biology and BL2104 Biochemistry and Molecular Biology. It first considers the structure of genes and the composition of genomes and then examines genetic activity in eukaryotes in relation to nuclear organisation, chromatin structure and epigenetic mechanisms. Regulation of expression at the levels of gene transcription, RNA processing, RNA stability and translation are next covered in detail, drawing particular attention to the nature of protein-nucleic acid interactions. Specific control mechanisms in different prokaryotic and eukaryotic systems, induced by environmental, cell cycle, and metabolic signals are highlighted.</p>			
<b>Programme module type:</b>	Compulsory for Biochemistry, Cell Biology, Molecular Biology. Optional for Behavioural Biology, Biology, Evolutionary Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	Normally BL2104	<b>Required for:</b>	BL4223, BL5421
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 3 x 16-hour practicals, split over several days, during the semester.		
	<b>Scheduled learning:</b> 81 hours	<b>Guided independent study:</b> 119 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Dr S MacNeill		
<b>Lecturer(s)/Tutor(s):</b>	Dr P Coote, Dr H Ferreira, Dr S MacNeill, Dr J Sleeman, Prof M Ryan, Prof M White		

## Biology - Honours Level 2014/15 - August 2014

BL3303 Membranes and Cell Communication			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	Lectures: 9.00 am Mon, Tue and Wed Practicals: to be arranged.		
<p>This module deals with the structural and functional organisation of biological membranes. The dynamic molecular components of biological membranes are studied by investigating the mechanisms involved in the control of membrane fluidity, and the biogenesis of new molecular components of the membrane. The central role that biological membranes play in the regulation of the movement of molecules between different extracellular, intracellular and transcellular compartments is also considered. The process of molecular transport is studied at both a theoretical and practical level. The interaction between the structural and functional organisation of the cell membrane is highlighted by studying the specialisation seen in the major transporting epithelial tissues. Topics covered include: (i) structural and kinetic analysis of ligand-receptor interactions; (ii) GTP-binding proteins and the generation of intracellular second messengers: cyclic AMP, cyclic GMP, diacyl glycerol and inositol triphosphate; (iii) the activation of receptor and intracellular protein kinases: serine/threonine and tyrosine kinases; (iv) de-sensitisation of signal responses and receptor 'cross-talk'; (v) direct and indirect activation of plasma membrane ion channels. The practical component includes experiments to illustrate methods used to elucidate signalling pathways as well as providing training in laboratory and transferable skills.</p>			
<b>Programme module type:</b>	Compulsory for Cell Biology. Optional for Biochemistry, Molecular Biology Biology and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	Normally BL2101	<b>Required for:</b>	BL4224, BL5420
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 3 x 7-hour practicals, split over several days during the semester.		
	<b>Scheduled learning:</b> 54 hours	<b>Guided independent study:</b> 146 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Dr M Bischoff		
<b>Lecturer(s)/Tutor(s):</b>	Dr R Ramsay, Dr G Prescott, Dr S Unkles, Dr M Bischoff, Prof T Smith, Prof F Gunn-Moore		

BL3307 Evolution				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	Lectures: 11 am Mon, Tue and Wed Practicals: to be arranged.			
Topics in this module will include: molecular variation and evolution, including phylogeny reconstruction; the evolution and maintenance of sex; the genetics of continuous traits, and the relative importance of continuous and discontinuous variation in evolution; evolutionary developmental biology; evolution of population genetic structure; the genetics of speciation, covering the evolution of pre- and post-zygotic isolation, and parapatric, sympatric and island speciation. Practicals will involve computer simulations to investigate a range of evolutionary phenomena, plus use of molecular markers to examine population structure and speciation.				
<b>Programme module type:</b>	Compulsory for, Marine Biology, Evolutionary Biology. Optional for Ecology and Conservation, Behavioural Biology, Biology, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Normally BL2105 or BL2106			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 1 x 2-hour and 1 x 3-hour practical during the semester.			
	<b>Scheduled learning:</b> 38 hours		<b>Guided independent study:</b> 162 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Prof T Meagher			
<b>Lecturer(s)/Tutor(s):</b>	Prof T Meagher, Dr D Ferrier, Dr D Barker, Dr N Bailey, Prof M Ritchie, Dr M Webster			

BL3308 Aquatic Ecology				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	Lectures: 10.00 am Mon, Tue and Wed Practicals: residential field trip.			
This module introduces the ecology of aquatic systems beginning with a description of the problems of life in a fluid medium. The module then considers the contrasting conditions that are inherent in freshwater, estuarine and marine systems. The influence of global climate variation and the close coupling between land and sea will be emphasised. Case studies will then be used to introduce the ecology of a variety of aquatic systems including tropical, temperate and polar systems. This module involves a residential field trip to Kindrogan field station in the Scottish Highlands.				
<b>Programme module type:</b>	Compulsory for Marine Biology. Optional for Behavioural Biology, Ecology and Conservation, Biology, Biology and Geology, Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Normally BL2105 or BL2106			
<b>Co-requisite(s):</b>	BL3000	<b>Required for:</b>	BL4301	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 1 x 3-day residential field course			
	<b>Scheduled learning:</b> 53 hours		<b>Guided independent study:</b> 147 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 14%, Coursework = 20%			
	<b>As used by St Andrews:</b> 3-hour Written Examinations = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Dr I Matthews			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Matthews, Prof C Todd, Dr P Miller, Dr R Aspden			

## Biology - Honours Level 2014/15 - August 2014

BL3309 Ecosystems and Conservation			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	Lectures: 10.00 am Mon, Tue and Wed Practicals: to be arranged.		
<p>This module will examine how ecosystems function and how they provide services for humans: information which is essential for ecologists, conservationists and land managers. The module will consider examples of natural systems being altered by man to demonstrate how ecosystems function and the consequences of anthropogenic change. Disturbance and regulation in ecosystems, atmospheric and hydrological regulation, (including the green house effect and acidification), soil ecology, conservation and management of natural resources, agricultural and grazed ecosystems (including GMOs), urban ecosystems and aspects of sustainable development will also be discussed.</p>			
<b>Programme module type:</b>	<p>Compulsory for Ecology and Conservation, Marine Biology, and Behavioural Biology.</p> <p>Optional for Biology, Biology and Geology, Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.</p>		
<b>Pre-requisite(s):</b>	Normally BL2105 or SD2001		
<b>Co-requisite(s):</b>	BL3000	<b>Required for:</b>	BL4254, BL4266, BL4268
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 2 x 3- hour practicals during the semester.		
	<b>Scheduled learning:</b> 39 hours	<b>Guided independent study:</b> 161 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Prof W Cresswell		
<b>Lecturer(s)/Tutor(s):</b>	Prof W Cresswell, Dr S Northridge, Dr I Matthews, Prof T Meagher, Dr R Aspden		

BL3310 Bioenergetics				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	Lectures: 12.00 noon Mon, Tue and Wed Practicals: to be arranged.			
<p>The conversion of one form of energy into another by a biochemical process is at the centre of all life. This module studies the biological systems for conserving energy from food oxidation and light absorption (photosynthesis) and the conversion of the resulting redox energy into chemical energy in the pyrophosphate bonds of ATP. The module also considers electron transfer processes in biology and the energetics of transport processes. Chemiosmotic theory and the principles are considered in detail as are the structure and function of electron and proton transfer systems of energy transducing systems. Practical classes will introduce the student to the methods used in this field of study. The module will comprise twenty lectures, eight hours tutorials/seminars in total, and twelve hours in practical classes.</p>				
<b>Programme module type:</b>	Compulsory for Biochemistry, Biomolecular Science. Optional for Molecular Biology Cell Biology Biology, Neuroscience and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL2104	<b>Required for:</b>	BL4222	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 2x 6-hour practicals, split over several days, and 3 x 3-hour student presentation seminars, during the semester.			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Dr J Nairn			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Nairn, Dr R Ramsay			

BL3311 Infection and Disease				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	Lectures: 10.00 am Mon, Tue and Wed Practicals: to be arranged.			
<p>This module has lectures in three component areas: parasite infections, viral disease, and pathogenicity of common bacterial infections, and will include consideration of host defences and effective treatment. In all three component areas the emphasis will be on understanding at the molecular level.</p>				
<b>Programme module type:</b>	Compulsory for Molecular Biology. Optional for Biochemistry, Cell Biology, Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Normally BL2101 and BL2104	<b>Required for:</b>	BL4211, BL4213	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks) and 2 x 9-hour practicals and 1 x 12-hour practical, split over several days, during the semester			
	<b>Scheduled learning:</b> 63 hours		<b>Guided independent study:</b> 137 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Dr P Coote			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Coote, Prof T Smith, Dr D Jackson, Prof M Ryan, Dr C Adamson, Dr P Kerry, Dr R Randall			

## Biology - Honours Level 2014/15 - August 2014

BL3315 Developmental Biology			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	Lectures: 11.00 am Mon, Tue and Wed Practicals: to be arranged.		
<p>This module deals with the fascinating and rapidly changing field of Developmental Biology. It examines how an organism develops from an egg to an adult (including instances of metamorphosis), as well as how lost or damaged body parts can be regenerated. Also the interactions between development and ecology and evolution will be considered. There will be a focus on some of the typical model species used in developmental biology, including fruit flies, nematodes, mice and frogs, but this will be expanded to include other valuable comparative models, such as sea squirts, annelids, cnidarians and flatworms. The course will encompass multiple biological levels, from molecules, through cells and embryos, to the environment and the organism's evolutionary history. As such this module is of wide relevance to a range of other biological disciplines.</p>			
<b>Programme module type:</b>	Optional for Neuroscience, Cell Biology, Evolutionary Biology, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	Normally BL2101 or BL2102		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures ( x11 weeks) and 2 x 15-hour practicals, split over several days, during the semester.		
	<b>Scheduled learning:</b> 63 hours	<b>Guided independent study:</b> 137 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 34%, Coursework = 0%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Dr D Ferrier		
<b>Lecturer(s)/Tutor(s):</b>	Dr D Ferrier, Dr A Ojanguren, Dr G Miles, Dr I Somorjai, Prof C Todd		

BL3316 Animal Plant Interactions			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	Lectures: 9.00 am Mon, Tue and Wed Practicals: to be arranged.		
<p>This module concerns the coevolution of plants and animals, including the ecological, behavioural and physiological aspects of their interactions. Pollination biology and the constraints on participating plants and animals are dealt with in depth, including applied aspects of crop pollination, and this is followed by a review of seed dispersal. Then patterns of herbivory by insects, vertebrates and other animals are considered, illustrating the interactions of plant physical and chemical defences and herbivores' reciprocal adaptations from feeding specialisations and host plant selection through to detoxification systems and life history adaptations. Interactions with third parties are also explained, especially plant-fungus-insect systems. There is an introduction to other tritrophic interactions (whereby plants can recruit herbivores' enemies as part of their defences, or recruit ants as biotic plant guards), to insects as plant pests, and to integrated and sustainable approaches to control measures and plant protection.</p>			
<b>Programme module type:</b>	Optional for Behavioural Biology, Ecology and Conservation, Evolutionary Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	Normally BL2102 or BL2106		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks), 1 x 3- hour practical and 1 x 3-hour student presentation seminar during the semester.		
	<b>Scheduled learning:</b> 39 hours	<b>Guided independent study:</b> 161 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 22%, Coursework = 12%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Prof P Willmer		
<b>Lecturer(s)/Tutor(s):</b>	Prof P Willmer, Prof G Ruxton, Prof S Hubbard, Dr A Karley, Dr J Wishart, Dr S Healy, Dr G Ballantyne		

## Biology - Honours Level 2014/15 - August 2014

BL3318 Biology of Marine Organisms			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	Lectures: 12 noon Mon, Tue and Wed Practicals: to be arranged.		
<p>This module will include lectures on the range of microbial and metazoan organisms and ecological systems in the marine environment. The coverage will range from bacteria, to algae, invertebrates and vertebrates (fish, birds, reptiles and mammals). The biology of marine organisms is considered in the context of both adaptations at the level of the individual and its expression in terms of large-scale latitudinal and depth-related variations in productivity and food web structure. Examples from the poles to the tropics and from shallow water to the deep ocean will be included. Practicals will be field- and laboratory-based and will provide an experimental introduction to both ecological and physiological problems in marine biology.</p>			
<b>Programme module type:</b>	<p>Compulsory for Behavioural Biology, Ecology and Conservation, Marine Biology.</p> <p>Optional for Evolutionary Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.</p>		
<b>Pre-requisite(s):</b>	Normally BL2102 or BL2105		
<b>Required for:</b>	BL4257, BL4259, BL4260, BL4301: (BL2105, BL3308, BL3318 or equivalent preferred but not essential)		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks), 2 x 3-hour practicals and 1 x 1-hour Museum quiz during the semester.		
	<b>Scheduled learning:</b> 40 hours	<b>Guided independent study:</b> 160 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Dr V Smith		
<b>Lecturer(s)/Tutor(s):</b>	Dr V Smith, Prof C Todd, Prof A Brierley, Prof P Hammond, Dr C Gollety, Dr A Onjanguren, Dr L Rendell, Dr C Smith, Dr R Aspden, Prof P Tyack, Dr L Boehme, Dr B McConnell, Dr D Thompson		



<b>BL3319 Animal Behaviour: A Quantitative Approach</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	Lectures: 9.00 am am Mon, Tue and Wed Practicals: to be arranged.			
This module is designed to provide a broad and multifaceted perspective on animal behaviour, emphasising contemporary theoretical, mathematical and statistical approaches to the discipline. Nobel-Prize-winning ethologist, Niko Tinbergen, pointed out that to understand behaviour fully researchers had to answer four types of questions, about its causation, function, development and evolution. All four areas are covered in the course, which includes lectures on the genetic, neural, physiological and experiential (i.e. learning) influences on behaviour; behavioural development; foraging; sexual behaviour, sexual selection and mate choice; communication, cooperation and culture. The course contains extensive material of a formal theoretical nature, and emphasises quantitative skills throughout. Students will be introduced to new mathematical and statistical approaches within the field.				
<b>Programme module type:</b>	Compulsory for Ecology and Conservation and Behavioural Biology. Optional for Evolutionary Biology, Marine Biology, Zoology, and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Normally BL2102	<b>Required for:</b>	BL4258, BL4263	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour lectures (x 11 weeks), 3 x 1- hour mini-project group meetings during the semester.			
	<b>Scheduled learning:</b> 36 hours		<b>Guided independent study:</b> 164 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 7%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Dr M Webster			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Webster Dr W Hoppitt, Dr M Webster, Dr L Rendell, Dr C Templeton, Dr S Healy, Prof M Ritchie, Prof V Janik, Dr W Heitler			

<b>BL3320 Statistical and Quantitative Skills for Biologists</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
Few biologists are statisticians or mathematicians, but all biologists use statistics and mathematics. This series of workshops is designed to build confidence in organising and analyzing data to address biological questions efficiently. The module will help you learn how to identify statistical and quantitative approaches, and how to manage and analyse data in a code driven statistical programming package. An introductory workshop will cover basic concepts and practical training that will be used in a choice of specific workshops that cover applications across the range of Biology.				
<b>Programme module type:</b>	Compulsory for all Biology degrees. Optional for Sustainable Development.			
<b>Pre-requisite(s):</b>	2 from BL2101 - BL2106			
<b>Required for:</b>	BL4273			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varied weekly contact, but to include 1 full-day of lectures in Pre-session week (8-hours), plus 2 x 3-hour introductory workshops and 5 x 3-hour practical workshops during the semester			
	<b>Scheduled learning:</b> 29 hours		<b>Guided independent study:</b> 71 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Prof W Cresswell			
<b>Lecturer(s)/Tutor(s):</b>	Prof W Cresswell, Dr G Ruxton, Dr A Smith, Dr D Barker, Dr R Ramsay			

## Biology - Honours Level 2014/15 - August 2014

BL3321 Advanced Critical Analysis Reading Party				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	1 week in summer vacation just prior to Orientation week			
An introductory residential module to Honours study for students studying Cell Biology, Neuroscience and Biology degrees held at the Burn between the resit diet and the start of semester 1. This module introduces students to the skill of critically analysing scientific literature and the methodology behind preparing research proposals. Students will work in groups to develop a grant proposal and present their ideas to a mock research grant panel. In response to detailed feedback students can improve their skills and finally submit an extended referees report on a real grant proposal.				
<b>Programme module type:</b>	Optional for Cell Biology, Evolutionary Biology, Neuroscience and all Biology Joint and Major/Minor degree programmes			
<b>Pre-requisite(s):</b>	2 from BL2101 - BL2106	<b>Anti-requisite(s):</b>	BL3000, BL3322	
<b>Co-requisite(s):</b>	Any 3000-level BL module			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 5-day residential course, 8-hours per day			
	<b>Scheduled learning:</b> 40 hours		<b>Guided independent study:</b> 60 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 5%, Coursework = 95%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Sleeman			
<b>Lecturer(s)/Tutor(s):</b>	Prof I Johnston, Dr J Sleeman, Prof F Gunn-Moore, Dr G Miles			

BL3322 Basic Biochemistry Laboratory				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	1 week in summer vacation just prior to Orientation week			
This module aims to provide students with the basic skills for independent laboratory work and an opportunity to develop academic skills such as: the design of experiments; logistic planning; the gathering and assessment of data; and the presentation of results. In addition, transferable skills such as group work, working to deadlines, numeracy, critical reading of peer-reviewed literature, and presenting material (oral and written) will be developed. Importantly, the course will also be an opportunity to meet and work with others in the honours cohort. The practical element will emphasise techniques in protein biochemistry.				
<b>Programme module type:</b>	Optional for Biochemistry, Molecular Biology, Cell Biology, Biology			
<b>Pre-requisite(s):</b>	BL2101 and BL2104	<b>Anti-requisite(s):</b>	BL3000, BL3321	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 5-day laboratory course, 8-hours per day			
	<b>Scheduled learning:</b> 40 hours		<b>Guided independent study:</b> 60 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 1-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R R Ramsay			
<b>Lecturer(s)/Tutor(s):</b>	Dr R R Ramsay, Dr C Adamson, Dr C Botting, Prof M White, Prof M Ryan, Prof R Randall			

BL4200 Literature-based Research Project			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Planned timetable:</b>	To be arranged.		
<p>This project will involve an extensive literature review to investigate a defined hypothesis or problem within the field of biology, appropriate to the degree programme being studied by each student. The project will involve diligence, initiative and independence in pursuing the literature, and the production of a high-quality dissertation that demonstrates a deep understanding of the chosen area of research. Students will be allocated to a member of staff who will guide and advise them in research activities throughout the academic year. The project will be written up in the form of a research dissertation.</p>			
<b>Programme module type:</b>	Either BL4200 or PS4050 compulsory for Biology and Psychology. BL4200 or BL4201 or PN4299 compulsory for Neuroscience. Optional for Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required		
<b>Anti-requisite(s):</b>	BL4201, PN4299		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 dedicated meeting with supervisor per week, students should expect to spend the equivalent of 8 weeks full-time on this research project.		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%		
	<b>As used by St Andrews:</b> Coursework = 100% (10% - Thesis outline and resource list 1,000 words 70% - Written thesis 15,000 words 20% - Viva (20 minutes))		
<b>Module Co-ordinator:</b>	Dr C Peddie		
<b>Lecturer(s)/Tutor(s):</b>	Individual Supervisors across the School of Biology		

## Biology - Honours Level 2014/15 - August 2014

BL4201 Experimental Research Project				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
<p>This project will involve extensive laboratory or field research to investigate a defined problem within biology, appropriate to the degree programme being studied by each student. The project will involve diligence, initiative and independence in pursuing the literature, good experimental design, good experimental and/or analytical technique either in the field or the laboratory, and excellent record keeping. The project will culminate in the production of a high-quality report that demonstrates a deep understanding of the chosen area of research. Students will be allocated to a member of staff within the School of Biology who will guide and advise them in research activities throughout the academic year.</p>				
<b>Programme module type:</b>	Optional for all Biology Joint or Major/Minor Degree programmes. May be taken for Biomolecular Science (conditions apply)			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Anti-requisite(s):</b>	BL4200, PN4299			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly contact: 1 dedicated meeting with supervisor per week. Students should expect to spend the equivalent of 1 semester full-time conducting supervised research and completing the associated assessments. This time is either condensed into 1 semester or spread out over the whole year.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 567 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Peddie			
<b>Lecturer(s)/Tutor(s):</b>	Individual Supervisors across the School of Biology			

BL4210 Practical Skills for Molecular Biology and Biochemistry				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Practical skills are the core of research in biochemistry and molecular biology. This module is designed to prepare students for laboratory research projects in internationally competitive research. The module is designed to foster skills such as experimental design, core practical skills, data analysis and excellent record keeping. Each practical requires some prior theoretical familiarity. Emphasis is placed upon experimental design - notably anticipation of experimental outcomes and the choice of appropriate experimental controls. This planning phase is followed by execution of the experiment and analyses of the data.</p>				
<b>Programme module type:</b>	Compulsory for Biochemistry, Biomolecular Science, Molecular Biology Optional for Cell Biology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Occasional seminars and 3 blocks of practicals conducted over several days.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 1-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr S Unkles			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Unkles, Prof M White			

BL4211 Antimicrobials - Mode of Action and Resistance				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will commence by establishing the fundamental basis of antimicrobial efficacy in terms of selective toxicity, with a brief history of antimicrobials and factors that make the ideal antimicrobial. This will be followed by study of the known inhibitory action of antibacterial and antifungal drugs at the molecular level, and study of the molecular basis of microbial resistance to these drugs. Lastly, potential new sources of antimicrobials will be considered, particularly antimicrobial peptides and 'natural' antimicrobials.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Cell Biology, Molecular Biology, Biology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL3311			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars ( x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 20%, Coursework = 30%			
	<b>As used by St Andrews:</b> 1-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr P Coote			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Coote			

BL4212 How Enzymes Work				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>All cells depend on enzymes to catalyse the reactions that produce the energy required for life and that make and repair DNA, proteins and lipids. Understanding enzymes and their regulation underpins research on, for example, drug development. This module will study how the structures and molecular functions of selected examples enable the biological roles. Topics will include flavoproteins, DNA repair enzymes, nitric oxides synthases and other enzymes depending on the research interests of the academic staff. It will develop deductive skills, literature research, and communication of specific knowledge from reviews and primary research articles, and will encourage integration of previous basic knowledge of bioenergetics, protein structure and function, gene expression and metabolic regulation into the exploration of the cellular roles of enzymes.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Cell Biology, Molecular Biology, Biology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL3301			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminars ( x 10 weeks).			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 130 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Dr R R Ramsay			
<b>Lecturer(s)/Tutor(s):</b>	Dr R R Ramsay, Dr J Ingledew, Prof M White			

## Biology - Honours Level 2014/15 - August 2014

BL4213 Molecular Virology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Viruses as a group include many important human and veterinary pathogens such as influenza virus, hepatitis C virus, foot and mouth disease virus as well as emerging viruses like Ebola virus, and remain a continuing threat to human and animal welfare. This module will consist of a mixture of lectures, tutorials and personal-based learning on aspects of RNA virus host interactions. The topics covered will include comparison of the molecular mechanisms employed by enveloped and non-enveloped viruses to enter and exit from cells, discussion of how small RNA viruses maximise their coding capacity, comparison of the replication of positive and negative strand RNA viruses, discussion of how selected viruses reprogram the host cell to ensure their own replication, description of how RNA viruses intercede with innate immune responses, and understanding of how selected viruses interact with their vectors. In addition, discussion of virus-related topics that have made headline news in recent years will be addressed, and an understanding of the more commonly used molecular techniques to study viruses will be expected.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology, Biology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL3311			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars (x 6 weeks), student debate			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof R Randall			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Randall, Prof M Ryan, Dr D Jackson, Dr C Adamson, Dr J Tilsner			

BL4215 Bacterial Virulence Factors				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>In order to establish an infection in a host, pathogenic bacteria rely on mechanisms to adhere to host tissue, gain entry into cells, escape the host's immune response and spread and survive within or on the host. These processes are mediated by bacterial virulence factors, i.e. proteins and other bacterial products that utilise and subvert diverse host cellular processes for the benefit of the pathogen. In this module students will explore how structural biology has led to significant breakthroughs in understanding the molecular bases of some important bacterial infections.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology Biology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL3301			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 4 weeks), 3 x 3-hour student talks			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 133 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 30%, Coursework = 30%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr U Schwarz-Linek			
<b>Lecturer(s)/Tutor(s):</b>	Dr U Schwarz-Linek			

BL4216 Structure-based Drug Discovery				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The process of developing a new drug from conception to the clinic takes on average 15 years and costs over \$800M. There are now many examples of drugs developed based on a knowledge of the three dimensional structure of the target, and all major pharmaceutical companies have structural biology as part of their core drug discovery programmes. Many drugs currently used to combat AIDS were developed from a detailed knowledge of key HIV proteins, as were the two drugs used for influenza. Most major pharmaceutical companies are targeting kinases in the search for new cancer therapies, with international efforts focusing on producing structural details of huge numbers of human kinases. This module will examine case studies of drugs that have been developed with the aid of structure-based methods.				
<b>Programme module type:</b>	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology and all Biology Joint or Major/Minor Degree programmes.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 4 weeks) and 1 x 2-hour student presentations in teams representing imaginary drug companies (x 3 weeks).			
	<b>Scheduled learning:</b> 14 hours		<b>Guided independent study:</b> 136 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 40%, Coursework = 20%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr J Nairn			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Gloster, Prof G Taylor, Dr J Nairn			

BL4220 Geomicrobiology - from Gold Mines to Global Warming, how Microbes influence our Planet				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
Geomicrobiology explores the interactions between microbes and materials within inorganic environments and investigates the effects of microbial activity on these substances. Throughout the Earth's history, microbes have successfully colonised numerous and different inorganic environments, and in the process have changed the chemical nature of geological materials therein. The current interest in geomicrobiology has been reawakened by climate change and environmental issues. The module will commence by investigating very early Earth and its initial colonisers 3.7 BYA - the sulphate-reducing and methane-producing anaerobic bacteria - and later development of the aerobic environment. Then issues concerning today's Earth and the consequences of geomicrobial cycling are investigated, as well tomorrow's Earth and the influence of microbial activity on global climate change. What are the future implications of geomicrobiological activity? Finally, hypotheses regarding the geomicrobiology of a variety of newly explored space environments are considered.				
<b>Programme module type:</b>	Compulsory for Biology and Geology. Optional for Biochemistry, Cell Biology, Ecology and Conservation, Molecular Biology, and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL1102			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S Unkles			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Unkles			

## Biology - Honours Level 2014/15 - August 2014

BL4222 Metabolic and Clinical Biochemistry				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module extends the students' knowledge of human metabolism and applies it to pathologies. The syllabus includes: a study of the integration of whole body metabolic processes, discussion of the role of biochemistry in investigating and monitoring human disease, the methods of diagnosing and treating some common diseases. Topics will cover integration of whole body metabolism, starvation processes, diabetes, metabolic variability, inborn errors of metabolism, endocrinology, homeostasis, plasma protein metabolism, muscle and hepatic metabolism, drug disposition and metabolism, and defects in glucose and lipid metabolism.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Biomolecular Science, and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars (x 10 weeks), 1 x 3-hour students presentations for 1 week			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 127 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 30%, Coursework = 30%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr W J Ingledew			
<b>Lecturer(s)/Tutor(s):</b>	Dr W J Ingledew, Dr R Ramsay and invited NHS staff			

BL4223 Chromosome Replication and Genome Stability				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Highly-efficiently chromosomal DNA replication is essential for all forms of cellular life on Earth and requires the complex interplay of a large range of protein factors in a temporally- and spatially-coordinated manner. In humans, defects in the replication process may lead to genetic disease or cancer. This module will summarise current knowledge of the enzymes and mechanisms of chromosomal DNA replication in bacterial, archaeal and eukaryotic cells with particular emphasis on exploring the diverse range of experimental systems and techniques used in the laboratory to probe the structure, function and regulation of the replication apparatus. Similarities and differences between cellular and viral DNA replication strategies will be explored and diverse aspects of the evolution of the replication machinery highlighted.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology, and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Normally BL3301 and BL3302			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks)			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr S A MacNeill			
<b>Lecturer(s)/Tutor(s):</b>	Dr S A MacNeill			



BL4224 Molecular Mechanisms of Membrane Trafficking				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Membrane trafficking mediates the transport of substances between different cellular organelles and the secretion of substances from cells. As such, regulation of membrane trafficking is applicable to all cell types, but especially to specialised secretory cells such as neurons, which secrete neurotransmitters and pancreatic beta-cells which secrete insulin. This module will consider how molecules control the movement of substances through the secretory pathway, but will focus on how cells regulate the release of contents. Within the module you will look at the proteins involved, the different experiments used to study the process and how model organisms are enhancing our understanding.				
<b>Programme module type:</b>	Optional for Biochemistry, Cell Biology, Molecular Biology, Neuroscience and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL3303			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks)			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 25%, Practical Examinations = 20%, Coursework = 55%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr G Prescott			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Prescott, Dr J Tilsner			

BL4232 Neural Mechanisms of Predatory and Avoidance Behaviours				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
Predators and their prey are locked in an evolutionary arms race which continuously refines and improves the abilities of predators to locate and capture prey, and of prey to detect and evade predators. This strong selective pressure has produced some spectacular adaptations in both the nervous systems and the overall anatomy of the animals concerned. This, combined with the usually unambiguous motivation of the animals involved in predator-prey interactions (eat or starve, escape or be eaten) has made such adaptations favoured targets for study by neuroscientists, behavioural scientists, and biomechanicists. Students on this module will undertake a series of guided case studies researching the primary literature, and the module will also include some hands-on laboratory work. The aim is both to uncover some general principles of neural and biomechanical organisation, and also to reveal the variety and ingenuity with which evolution has found different solutions to shared problems.				
<b>Programme module type:</b>	Optional for Behavioural Biology, Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	PN3313			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks)			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr W J Heitler			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Heitler, Prof K Sillar			

## Biology - Honours Level 2014/15 - August 2014

BL4248 Human Physiology of Diving				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will provide an understanding of diving physics and how pressure changes affect the physiology of the human diver. It will use both tutorials and self-study sessions to cover theoretical topics such as oxygen toxicity, nitrogen narcosis and the symptoms and treatment of decompression illness. Thermal considerations of diving, long-term effects and the physiology of technical mixed gas and rebreather diving will also be investigated.</p> <p>Students will also explore applied topics such as the management of diving casualties and the treatment of diving-associated illnesses. The final emphasis will be on how our understanding of diving physiology directs current practice in the UK on safe diving practices.</p>				
<b>Programme module type:</b>	Optional module for Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr C Peddie			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Peddie, Dr G Prescott			

BL4249 Scientific Diving				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	Full Time 2-3 weeks in March/April			
<p>This module will provide both theoretical and practical experience of the techniques used by scientific divers. The module is restricted to students who have an existing diving qualification (PADI Advanced Open Water Diver or BSAC Sports Diver or equivalent). Seminars during the field trip will cover diving safety, dive project planning, management, risk assessment and the theory behind underwater surveying techniques. Abroad, students will receive training in underwater marine identification, construction and deployment of underwater surveys and sampling techniques, gaining practical experience of recording, analysing and interpreting survey data. Then they conduct a mini-research project using suitable survey techniques and present their findings through a report and a presentation.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required, PADI Advanced Open Water Diver or BSAC Sports Diver (or equivalent)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 8 hours per day for 2 weeks.			
	<b>Scheduled learning:</b> 96 hours		<b>Guided independent study:</b> 54 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 45%, Coursework = 55%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Peddie			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Peddie, Dr S Whiten			

BL4254 Fisheries Research				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will provide an introduction to the utilisation of fish stocks in a sustainable way. It will focus on how the status of these stocks can be assessed, the problems associated with determining catch limits, and how advice from fisheries scientists is communicated to managers. There will be a mixture of dedicated lectures (including talks from outside experts), student-led seminars, tutorials and practical computer sessions.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL3309			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks)			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 50%, Coursework = 20%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Paxton			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Paxton			

BL4255 Marine and Environmental Biotechnology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will examine the diversity of useful natural products from the sea, consider the ways in which genomic and other approaches are being used to bioprospect for new substances (especially from micro-organisms), learn how genomic approaches are overcoming the problem of unculturability of many marine prokaryotes to find such compounds, and explore some of the more unusual applications of materials derived from marine invertebrates. It will also consider how marine biotechnology is contributing to improved disease control in aquaculture, how it can help the 'greening' of more conventional 'dirty' industries and may enable us to meet our future energy needs via renewable biofuels. The societal, ethical and environmental issues associated with the development of environmental biotechnology are also considered.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Ecology and Conservation, Marine Biology, Molecular Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks)			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 30%, Coursework = 30%			
	<b>As used by St Andrews:</b> Written Examination = 40% (open book essay), Practical Examinations = 30%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Dr V J Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr V J Smith			

## Biology - Honours Level 2014/15 - August 2014

BL4256 Marine Bioacoustics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module will provide seminar- and practical-based instruction on sound propagation in the ocean, use of sound by marine mammals for communication, orientation, and foraging (as monitored by humans using techniques to record sound). It will also examine sound-based conflicts between humans and marine organisms.				
<b>Programme module type:</b>	Optional for Behavioural Biology, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 7 x 2-hour seminars, 8 x 1-hour seminars and 2 x 3-hour practical over a 4 week period			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 25%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof P Tyack			
<b>Lecturer(s)/Tutor(s):</b>	Prof P Tyack, Prof V Janik			

BL4258 Foraging in Marine Mammals				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module will provide primarily seminar and practical-based analysis of the life-history requirements of foraging in marine mammals, geographical and physiological constraints on finding food, food and feeding with a focus on types of prey and adaptations by the prey, adaptations for marine mammals feeding in the marine environment, optimal foraging theory, and optimal diving theory. Initial lectures will focus on theoretical issues and description of methods to study foraging. Students will then conduct case-studies of marine-mammal foraging, which will be presented in a seminar format as a group. Some practical work will also be included.				
<b>Programme module type:</b>	Optional for Behavioural Biology, Ecology and Conservation, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL3319			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Introductory lecture plus 3 x 1-hour lectures (x 3 weeks), 2 x 2-hour student-led seminars (x 4 weeks)			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 124 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr P Miller			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Miller, Dr S Smout, Dr D Thompson			

BL4259 Marine Mammals and Man				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>Marine mammals interact with human activities in a variety of ways and are frequently the focus of more general concerns about the health and exploitation of marine ecosystems. This module explores the impact of these activities on individuals and populations of seals and cetaceans, and vice versa. Most marine mammals species are long-lived and slow reproducing and the impacts of unmanaged human activities can be severe; a number of species or populations are threatened as a result. The module explores how best to provide robust scientific advice to inform conservation and management at local, national and international level.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL3318			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 12 x 2-hour seminars over two weeks followed by 4 x 3-hour presentation assessment sessions at the end of the semester.			
	<b>Scheduled learning:</b> 36 hours		<b>Guided independent study:</b> 114 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof P S Hammond			
<b>Lecturer(s)/Tutor(s):</b>	Prof P S Hammond, Dr S Northridge, Dr A Hall, Dr Gordon			

BL4260 Biological Oceanography				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will provide primarily seminar-based instruction on the fundamentals of Biological Oceanography (BO). A few introductory lectures will focus on basic principles in BO and oceanography, including physical and geochemical principles as they apply to biological oceanography. Students will present seminars on particular focus areas within each lecture topic, based upon reading primary literature. BO is a broad field, so the module will provide an overview of the field with depth in a few chosen areas. At least one practical will be offered on the use of remote-sensing data for ocean observation, and we hope to develop a practical of zooplankton sampling. This module should coordinate especially well with marine acoustics and scientific diving.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL3318			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 x 2-hour seminars (x 6 weeks)			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 130 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr P Miller			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Miller			

## Biology - Honours Level 2014/15 - August 2014

BL4262 Physical Oceanography				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module aims to give a broad overview of the concepts and fundamental achievements of physical oceanography. Physical oceanography is the study of physical conditions and physical processes within the ocean, especially the motions and physical properties of ocean waters. A series of lectures will be provided to assure that students have the broad background required to tackle primary literature in this field. Students will present seminars on particular focus areas within each lecture topic, based upon reading primary literature.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 2-hour seminar or lecture (x 5 weeks)			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 130 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 40%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr L Boehme			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Boehme			

BL4263 The Question of Culture in Cetaceans				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The existence and extent of social learning and cultural transmission in non-humans is a very active area of current research, as well as of controversy, with an active ongoing debate. The aim of this module is to provide an introduction to this area through considering the conceptual issues and direct and indirect evidence for cultural transmission in cetaceans, the whales and dolphins. We will consider what is meant by the term 'culture', how it can be studied in non-humans, and the evidence for and against such processes being present in cetacean societies.</p>				
<b>Programme module type:</b>	Optional for Behavioural Biology, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL3319			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 x 2-hour seminars over 6 weeks			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 130 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 10%, Coursework = 50%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr L Rendell			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Rendell			

BL4266 Conservation Research Methods				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>The conservation of animal and plant populations relies initially on information of population sizes and trends. This information can only be collected by fieldwork. This module teaches the basic field techniques that underpin the monitoring of populations. Each week the theory behind a different technique is introduced, then the technique is practiced in the field, and finally data collected by the technique are analysed and discussed in a workshop at the end of the week, so that a full understanding of a technique and its proper application is gained. The module ends with students carrying out a project applying and integrating the techniques they have learnt.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Sustainable Development, Zoology, and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL3309			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Variable combination of lectures, field practicals, data collection in the field and analysis workshops per week for 11 weeks			
	<b>Scheduled learning:</b> 40 hours		<b>Guided independent study:</b> 110 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof W Cresswell			
<b>Lecturer(s)/Tutor(s):</b>	Prof W Cresswell			

BL4268 Conservation and Management of Biodiversity				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will focus on the scientific problems associated with the conservation and sustainable use of animals and plants, and on the way in which scientific advice on these issues is provided. Initial lectures will cover sustainable development and the precautionary principle; the causes of extinction; the economics of conservation; management of exploitation; and estimating species richness. After this student-led seminars will cover a range of more specialist issues of current concern. Practical work on population viability analysis, classifying populations using the IUCN criteria, and species richness estimation may be included.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL3309			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks) plus 6 additional 2-hour lectures during the semester			
	<b>Scheduled learning:</b> 34 hours		<b>Guided independent study:</b> 116 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Ojanguren			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Ojanguren, Dr M Dornelas			

## Biology - Honours Level 2014/15 - August 2014

BL4270 Plant-environment Interactions				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module will provide an analysis of the ways in which plants interact with their physical, chemical and biological environments. This is a wide-ranging course which will bring together current knowledge of the physiological and molecular responses of plants within the wider context of how whole organisms and communities respond to the environment. Topics include: parasitism, plant pathogens and diseases, symbioses, plant stress responses, and human influences such as pollution, bioremediation and genetic modification.				
<b>Programme module type:</b>	Optional for Cell Biology, Ecology and Conservation, Sustainable Development and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks), plus 1 x additional seminar			
	<b>Scheduled learning:</b> 24 hours		<b>Guided independent study:</b> 126 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 34%, Coursework = 66%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Wishart			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Wishart, Prof J Raven, Prof S Hubbard			

BL4273 Bioinformatics for Biologists				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module is about using computers to search and study protein and DNA sequences, and related data such as mRNA expression levels. Vast quantities of such data are publicly available, and, if viewed in the right way, can provide strong evidence concerning function, structure, and evolution of DNA, RNA, proteins and genes. Because of this, computational analysis has become a crucial component of modern biology, including biochemistry, molecular biology, ecology, evolutionary biology and biomedical research. With hundreds of genome sequences and vast quantities of expression data available, the approach has greater potential than ever before. This module will give an overview of the data, software and methods of analysis, and in-depth practical training in applying bioinformatics techniques to questions of biology and biomedical research. Case studies where researchers use genomes to ask questions about divergence, adaptation and speciation will be discussed. The emphasis of the module is not mathematical, but rather concerns data, the general features of methods, use of software, applications relevant to biology, and results. The module will involve use of computers and simple computer programming, for which training will be provided as part of the module.				
<b>Programme module type:</b>	Optional for Biochemistry, Cell Biology, Evolutionary Biology, Marine Biology, Molecular Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Normally BL3320			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour computer-based practical (x 8 weeks) plus 6 x 1-hour lectures plus 1 x 1-hour seminar			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 127 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr D Barker			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Barker, Dr D Ferrier, Prof O Gaggiotti, Dr A Smith			



BL4274 Evolutionary Developmental Biology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Evolution of new morphologies involves changes to the development of organisms. The field of evolutionary developmental biology is thus becoming established as a major and essential component of any comprehensive understanding of evolutionary biology. This module aims to cover some of the main, current themes in evolutionary developmental biology. Since animal life evolved in the sea, much of what we can learn about the major events in animal evolution can be obtained from studying marine invertebrates. Consequently the examples covered in this module will tend to be drawn from these organisms.</p>				
<b>Programme module type:</b>	Optional for Cell Biology, Evolutionary Biology, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar ( x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D Ferrier			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Ferrier, Dr I Somorjai			

BL4275 Evolution in Action				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
<p>This module will focus on recent developments relating to evolutionary biology, placing particular emphasis on research related to medical or societal application or public policy. Examples of topics to be covered include: emergent diseases, biodiversity policy, conservation management, biological impacts of climate change, and public understanding of science.</p>				
<b>Programme module type:</b>	Optional for Cell Biology, Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks) plus an additional 2 x 2-hour seminars.			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 124 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof T R Meagher			
<b>Lecturer(s)/Tutor(s):</b>	Prof T R Meagher			

## Biology - Honours Level 2014/15 - August 2014

BL4278 Biology of Dinosaurs and Other Extinct Vertebrates				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>It seems natural to use our understanding of extant biology to make inferences about the past. This allows us to test ideas about evolution and biodiversity in a wider context. Additionally, "rewilding" is an active but controversial strand of conservation biology that suggests that where "keystone" species have gone extinct, we should introduce an analogous species. Vertebrates fossilise well, and so offer a good foundation of source material. They are generally large and complex organisms, and we particularly focus on the large representatives of each taxonomic group; this allows us to explore the physical constraints on the functioning of organisms.</p>				
<b>Programme module type:</b>	Optional for Evolutionary Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 35%, Coursework = 15%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof G Ruxton			
<b>Lecturer(s)/Tutor(s):</b>	Prof G Ruxton			

BL4280 Evolution and Human Behaviour				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Evolutionary biologists, anthropologists and psychologists have taken evolutionary principles and used them to explain a range of human characteristics, such as homicide, religion and sex differences in behaviour. Other researchers are sceptical of these interpretations, and critical of the methods. Moreover, researchers disagree as to the best ways to use evolution to explore humanity, and a number of schools of thought have emerged. This module will introduce and critically evaluate the main evolutionary approaches currently being used, including socio-biology, evolutionary psychology, behavioural ecology and gene-culture co-evolution.</p>				
<b>Programme module type:</b>	Optional for Behavioural Biology , Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr M Webster			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Webster. Dr K Cross, Dr L Dean, Dr C Evans, Dr A Navarrete			

BL4281 Animal Communication and Cognition				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Learning to produce sounds is a particularly interesting subject as far as humans are concerned because it is such a notable feature of our own species. Why do we show it, and how did it evolve? As there is little evidence of it in any other primates we need to look further afield for clues. It is found in several other mammalian orders and in three orders of birds, and the evidence for it and nature of it will be examined in these examples. We will discuss why selection may have favoured it in each case. We will also consider vocal learning in a broader sense, including its use in animals that do not themselves produce sounds.</p>				
<b>Programme module type:</b>	Optional for Behavioural Biology, Marine Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 30%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50% (talk = 30% + handout = 20%)			
<b>Module Co-ordinator:</b>	Prof V Janik			
<b>Lecturer(s)/Tutor(s):</b>	Prof V Janik, Dr T Gotz			

BL4282 Biology and Behaviour of Social Insects				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will examine and compare the biology of the four main groups of social insects: termites, ants, wasps and bees. Sociality in other groups (aphids, beetles) will also be considered briefly. Topics will include the evolution of sociality, social organisation and social control systems, reproductive strategies, and diverse communication modes including pheromonal systems, acoustic systems, and 'bee dances'. Aspects of foraging behaviour and learning abilities will also be considered, particularly for ants (leaf cutter ants, army ants, slave-making ants) and for bees both eusocial and semi-social. There will be strong evolutionary, ecological and behavioural themes, and relevance also to conservation issues.</p>				
<b>Programme module type:</b>	Optional for Behavioural Biology, Ecology and Conservation, Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar (x 11 weeks).			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof P Willmer			
<b>Lecturer(s)/Tutor(s):</b>	Dr D M Shuker, Prof P Willmer			

## Biology - Honours Level 2014/15 - August 2014

BL4284 Breeding Systems and Sexual Conflict				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Studies of mating systems in animals are primarily concerned with how animal societies are structured in relation to sexual behaviour. In plants, where many organisms do not have separate males and females, the term refers to the degree to which individuals are self-compatible or the amount of out-crossing that occurs. The effects of breeding system on sexual selection and sexual conflict, together with the costs of inbreeding and the evolution of mating systems, are central concerns of this module.				
<b>Programme module type:</b>	Optional for Behavioural Biology, Evolutionary Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks)			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Smith, Dr J Graves, Prof T R Meagher, Prof M Ritchie			

BL4285 Complex Systems in Animal Behaviour				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Behaving animals form complex systems, and can create complicated and beautiful phenomena, such as flocks of birds, termite nests, and patterns of army ant swarms. This course will look at research that examines animal behaviour from a complex systems perspective, where analyses range from captive housing of entire bird flocks, computer simulation, and use of robots to interact with the animals. Introductory lectures will be followed by seminar-style discussion of the primary literature, computer practicals, and hands-on practicals where students will identify complex systems in animal behaviour around St Andrews.				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Behavioural Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 14 x 1-hour seminars plus 4 x 2-hour computer-based practical classes over 8 weeks			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 25%, Practical Examinations = 0%, Coursework = 75%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 25%, Coursework = 75%			
<b>Module Co-ordinator:</b>	Dr V A Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr V A Smith			

BL4286 Advanced Topics in Evolution				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>In this module, we will consider outstanding questions in modern Evolutionary Biology to develop a detailed understanding of research issues in this field. Both molecular and whole organismal approaches will be addressed. Topics will be based on classic papers in the literature raising theoretical questions about the origin of species, adaptation, genetic drift and natural and sexual selection. Each classic paper will be combined with a recently published study addressing one of these theoretical topics. We will use tutorials and student-led seminars to address the topics in detail. The result will be an exciting opportunity to tackle classic topics in evolution and learn how the very latest research addresses these issues.</p>				
<b>Programme module type:</b>	Optional for Behavioural Biology, Ecology and Conservation, Evolutionary Biology, Marine Biology, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	Permission of Biology Honours Adviser required			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 11 weeks).			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 50%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof M Ritchie			
<b>Lecturer(s)/Tutor(s):</b>	Dr N Bailley, Prof M Ritchie			

BL4301 Polar Ecology: A field course in Antarctica				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	To be confirmed			
<b>Planned timetable:</b>	To be arranged.			
<p>This module will provide a theoretical and practical introduction to the ecology and key ecosystem components of Antarctica with emphasis on marine ecology, ecosystem functionality and conservation issues. Students will participate in a two-week vessel-based expedition to Antarctica during the austral summer (northern winter). This field trip involves traveling to southern Argentina, conducting at-sea surveys during transit to/from the Antarctic Peninsula, participating in shore-based activities (e.g. observations at penguin colonies, visit to active research station), and exploring Antarctic coastal waters from small boats and the ice-strengthened vessel. Through a series of lectures, student-led seminars, workshops, on-board practicals and field excursions, students will gain appreciation of and insights into the diversity, complexity, scientific and management challenges of the Antarctic ecoregion.</p>				
<b>Programme module type:</b>	Optional for Ecology and Conservation, Marine Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes			
<b>Pre-requisite(s):</b>	BL2105, BL3308, BL3318 or equivalent preferred but not essential; Medical certificate documenting fit for travel to remote Antarctica			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5-week field trip involving extensive travel and 100 hours of contact time on the ship			
	<b>Scheduled learning:</b> 100 hours		<b>Guided independent study:</b> 50 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S Heinrich			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Heinrich, Dr L Boehme			

## Biology - Honours Level 2014/15 - August 2014

BL4601 Research Project Development and Methodology				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to student on the MBiochem programme.			
<b>Planned timetable:</b>	External Placement			
<p>This distance learning module will look in detail at the processes involved in creating a scientific research project. The aim of the module is for the students to develop independent thought in experimental design. While on placement, a series of online assessments will test the students' ability to critically analyse research literature, identify core and specialised techniques in biochemistry, design experiments for specific research questions, quantitatively and statistically analyse data and publish research in the appropriate manner. The students should ultimately gain valuable skills necessary for successful independent research careers.</p>				
<b>Programme module type:</b>	Compulsory for the MBiochem.			
<b>Pre-requisite(s):</b>	Approved entry on to the MBiochem degree			
<b>Learning and teaching methods and delivery:</b>	<b>This is a Study Abroad or Work Placement module.</b>			
	<b>Weekly contact:</b> 1 tutorial each week for 5 weeks.			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 0 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Nairn			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Nairn, Dr G Prescott, Dr A Smith, Prof M Ryan			

BL4602 External Research Placement				
<b>SCOTCAT Credits:</b>	100	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Only available to students on the MBiochem programme.			
<b>Planned timetable:</b>	External placement			
<p>The module constitutes an independent 7-12 month external research placement hosted by an independent institute/company. The project will be fully supervised at the host institute/company and student performance will be assessed jointly by the immediate supervisor and a member of staff in the School of Biology. During the module students will have the opportunity to practice and learn a range of scientific and generic skills, including an element of independent working, in a working environment outside St Andrews. Ultimately, the module will allow students to gain substantial research experience and work experience thus enhancing their future employability.</p>				
<b>Programme module type:</b>	Compulsory for the MBiochem.			
<b>Pre-requisite(s):</b>	Approved entry on to the MBiochem degree			
<b>Learning and teaching methods and delivery:</b>	<b>This is a Study Abroad or Work Placement module.</b>			
	<b>Weekly contact:</b> External Placement			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 0 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr P Coote			
<b>Lecturer(s)/Tutor(s):</b>	Individual Supervisors across the School of Biology			

BL5420 Seeing is Believing – Microscopy and Image Analysis in Cell and Developmental Biology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will introduce you to advanced imaging techniques, such as Confocal, Super-resolution, TIRF and Electron Microscopy and how these techniques have been utilised to address fundamental questions in Cell and Developmental Biology. You will get the opportunity to research techniques that are at the forefront of modern Biology and to develop skills in ImageJ analysis of imaging data, a skill that will be central to the advancement of bioscience in the coming years. Activities will be supplemented with research talks from academics at the cutting edge of their field and the opportunity to see advanced imaging techniques in practice.</p>				
<b>Programme module type:</b>	Optional for Biochemistry MBiochem.			
<b>Pre-requisite(s):</b>	BL3303			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 20%, Practical Examinations = 30%, Coursework = 50%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr M Bischoff			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Bischoff, Prof F Gunn-Moore, Dr J Sleeman			

BL5421 Chromatin and Genome Stability				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will introduce you to the fundamental concepts of chromatin structure and function and how this affects genome stability. DNA repair and telomere maintenance are perhaps the most significant factors affecting genome stability and these processes are central to the understanding of cancer cell biology. Indeed, most existing anti-cancer agents induce DNA damage and current efforts to target chromatin factors therapeutically are showing promise. You will have the opportunity to independently research and present seminars on the applied biology of chromatin and DNA repair within model organisms such as budding yeast, <i>Caenorhabditis elegans</i> and <i>Drosophila melanogaster</i>. The seminars and student presentations will be supplemented with guest lectures from scientists at the cutting edge of chromatin research and students will also have the opportunity to engage in research debates on topics at the forefront of modern cancer biology. Importantly, you will be expected to design and defend a research proposal that addresses an unsolved question of your choice within the field of genome stability.</p>				
<b>Programme module type:</b>	Optional for the MBiochem.			
<b>Pre-requisite(s):</b>	BL3302			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 20%, Practical Examinations = 25%, Coursework = 55%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr H Ferreira			
<b>Lecturer(s)/Tutor(s):</b>	Dr H Ferreira			

## Biology - Honours Level 2014/15 - August 2014

BL5499 Advanced Laboratory Research Project			
<b>SCOTCAT Credits:</b>	60	SCQF Level 11	<b>Semester:</b> Whole Year
<b>Planned timetable:</b>	variable, as needed		
<p>This project will involve extensive and advanced laboratory work to investigate a defined problem within biochemistry, appropriate to the M.Biochem. degree. The project will involve initiative and independence in experimental design and in pursuing the literature, excellent experimental and analytical techniques. The project will begin with an assessed project proposal and culminate in the production of a high-quality dissertation that integrates an awareness of the project subject and a critical, extensive and detailed knowledge of the relevant theories, concepts and principals. Students will be allocated to a member of staff within the School of Biology who will guide and advise them in research activities throughout the academic year. The project will be presented in the form of a proposal, a research dissertation, an oral presentation and a viva.</p>			
<b>Programme module type:</b>	Compulsory for the MBiochem.		
<b>Pre-requisite(s):</b>	BL4601 and BL4602		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 dedicated meeting with supervisor per week.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 567 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%		
	<b>As used by St Andrews:</b> Coursework (Project proposal, Dissertation, Presentation and Viva) = 100%		
<b>Module Co-ordinator:</b>	Dr C Adamson		
<b>Lecturer(s)/Tutor(s):</b>	Individual Supervisors across the School of Biology		



## School of Chemistry

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Chemistry (CH) modules

CH3431 Chemistry Workshop				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
The aim of the module is to provide a basis in organic spectroscopy, molecular symmetry and point groups and their application to inorganic spectroscopy, and crystallography and X-ray diffraction. In addition, students will gain experience in chemical information retrieval and searching on-line databases.				
<b>Programme module type:</b>	Compulsory for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry and Geology, Chemistry with External Placement, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement, Chemistry and Physics, Materials Chemistry, Materials Chemistry with External Placement. Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in at least two of CH2501, (CH2601 or CH2603) and CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars and 1 or 2 lectures, and occasional tutorials, through afternoons of Semester 1 and afternoons (weeks 1 - 7) of Semester 2.			
	<b>Scheduled learning:</b> 50 hours		<b>Guided independent study:</b> 50 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 100%, Coursework = 0%			
	<b>As used by St Andrews:</b> 5 x 1-hour Practical Examinations = 100%			
<b>Module Co-ordinator:</b>	Dr R A Aitken			
<b>Lecturer(s)/Tutor(s):</b>	Dr R A Aitken, Dr T Lebl, Prof M Buehl, Prof P Lightfoot, Prof W Zhou, Prof P A Wright, Prof D Philp, Dr C H Botting, Prof S E M Ashbrook, Dr C Cazin			

## Chemistry - Honours Level - 2014/15 - August 2014

CH3441 Mini Chemistry Project			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	9.00 am - 1.00 pm Mon - Fri for 4 weeks (Weeks 8 - 11).		
This is a group-based exercise where the students will tackle an unseen problem. Skills to be developed will vary but will include some or all of the following: The use of spectroscopy, retrosynthetic analysis, literature searching, web based searching and design, synthesis, catalysis, mechanistic studies, computational chemistry, surface chemistry, biological chemistry, communication skills.			
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry, Chemistry with French, Materials Chemistry, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics, Chemistry with Medicinal Chemistry and External Placement, Chemistry and Physics, Materials Chemistry with External Placement. Optional for Chemistry and Mathematics.		
<b>Pre-requisite(s):</b>	Passes in at least two of CH2501, (CH2601 or CH2603) and CH2701		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 4 hours x 5 days (Weeks 8 - 11)		
	<b>Scheduled learning:</b> 80 hours	<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 60%, Coursework = 40%		
	<b>As used by St Andrews:</b> 30-minute Practical Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr M L Clarke		
<b>Lecturer(s)/Tutor(s):</b>	A selection of the Academic Staff		

CH3512 Organometallic Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module offers a systematic introductory treatment of organometallic compounds, emphasising fundamental concepts and the principal functional groups of organometallic chemistry. Topics include: the haptic nomenclature and 18-electron rule; synthesis of complexes of CO, alkyl, alkene, alkyne and carbocyclic ligands; static and dynamic structures; reactions of coordinated ligands; unit processes involved in homogeneous catalytic cycles.				
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement, Chemistry and Physics. Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603) and CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 - 3 lectures per week over 9 - 10 weeks within Weeks 1 - 11 and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof S P Nolan			
<b>Lecturer(s)/Tutor(s):</b>	Prof S P Nolan, Prof P C J Kamer			

CH3513 Advanced Solid State Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module on Advanced Solid State Chemistry brings together a number of advanced concepts including advanced crystal chemistry, electronic effects, phase equilibria and extended defects. It is key to the understanding of both modern solid state chemistry and materials science.				
<b>Programme module type:</b>	Compulsory for Materials Chemistry, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603) and CH2701			
<b>Required for:</b>	CH5716			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 - 3 lectures per week over 9 - 10 weeks (within Weeks 1 - 11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr P A Connor			
<b>Lecturer(s)/Tutor(s):</b>	Dr P A Connor, Dr R T Baker			

## Chemistry - Honours Level - 2014/15 - August 2014

CH3514 Physical Inorganic Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module aims to develop the student's understanding of the mechanisms that lie behind the reactions of inorganic compounds. The material will include studies of the different types of reactions that occur at metal centres and how they operate in complex systems such as metal-containing drugs and homogeneous catalysis. A second major component of the module will cover the use of spectroscopic techniques, including multinuclear NMR and EPR, to characterise main group and other inorganic compounds.</p>				
<b>Programme module type:</b>	<p>Compulsory for Chemical Sciences, Chemistry, Chemistry and Geology, Materials Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement, Materials Chemistry with External Placement, Chemistry and Physics.</p> <p>Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.</p>			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603) and CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 82 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr B E Bode			
<b>Lecturer(s)/Tutor(s):</b>	Dr B E Bode, Dr E Zysman-Colman			

CH3521 Inorganic Chemistry Laboratory				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 12.00 noon or 1.00 pm Mon to Fri (Weeks 1 - 6)			
This module comprises practical experiments involving synthesis, characterisation and measurements in inorganic chemistry.				
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry and Geology, Chemistry with Medicinal Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement, Materials Chemistry, Materials Chemistry with External Placement. Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603) and CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Daily 3- or 4-hour morning practical classes (Weeks 1 - 6).			
	<b>Scheduled learning:</b> 90 hours		<b>Guided independent study:</b> 10 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr P Kilian			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Kilian, Dr E Zysman-Colman, Dr F Laibe, Prof P Kamer			

CH3612 Synthetic Methodology				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module will cover a wide range of synthetic methods and applications of the methods to the synthesis of complex molecules. Students will gain a deep understanding of the importance of methods involving sulfur, phosphorus, boron, silicon, organolithium and organozinc reagents. Students will also be introduced to modern methods of alkene, alkyne and biaryl synthesis using palladium and ruthenium catalysts. The use of the protecting groups in conjunction with these synthetic methods will also be covered.				
<b>Programme module type:</b>	Compulsory for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement . Optional for Chemistry with French, Chemistry with French and External Placement.			
<b>Pre-requisite(s):</b>	Passes in (CH2601 or CH2603) and at least one of CH2501 and CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof N J Westwood			
<b>Lecturer(s)/Tutor(s):</b>	Prof N J Westwood, Dr M L Clarke			

## Chemistry - Honours Level - 2014/15 - August 2014

CH3613 Carbohydrate and Nucleic Acid Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The aim of the module is to cover aspects of the chemistry of nucleic acids. It will begin with an introduction to carbohydrate chemistry including discussion of biological processes, the synthesis of carbohydrates and carbohydrate-based pharmaceuticals. The structure and chemical synthesis of nucleic acids will then be discussed. The chemical reactivity of DNA and the ways in which it is chemically damaged will be examined. The chemical reactions of DNA will be related to mechanisms of carcinogenesis. The ways in which a range of drugs interact with DNA will be discussed in detail.</p>				
<b>Programme module type:</b>	Compulsory for Biomolecular Science, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement.			
<b>Pre-requisite(s):</b>	Passes in (CH2601 or CH2603) and at least one of CH2501 and CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr G J Florence			
<b>Lecturer(s)/Tutor(s):</b>	Dr G J Florence, Dr E R Kay			

CH3615 Mechanism in Organic Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>The objective of this module is to provide the student with a thorough understanding of the mechanistic aspects of organic chemistry. A problem-solving approach is employed in order to develop the ability to elucidate information, both qualitative and quantitative, concerning reaction mechanisms from experimental data. The module will also focus on the critical role of orbitals in determining the reactivity and selectivity of organic compounds. Reaction mechanism described as a flow of electrons through a correctly aligned orbital manifold will be developed as a tool to explore key topics in synthetic chemistry, with particular emphasis on stereoelectronic effects and aspects of alicyclic chemistry.</p>				
<b>Programme module type:</b>	<p>Compulsory for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry, Chemistry with External Placement, Materials Chemistry, Materials Chemistry with External Placement, Chemistry with Medicinal Chemistry and External Placement, Chemistry and Physics.</p> <p>Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics, Materials Chemistry MChem.</p>			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of (CH2501 and CH2701), or (CH2501 and CH2701) for students on the Chemistry and Physics programme only			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 - 3 lectures per week over 9 - 10 weeks within Weeks 1-11 and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof D Philp			
<b>Lecturer(s)/Tutor(s):</b>	Prof D Philp, Prof A D Smith			

## Chemistry - Honours Level - 2014/15 - August 2014

CH3621 Organic Chemistry Laboratory				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 12.00 noon or 1.00 pm Mon to Fri (Weeks 1-5)			
Practical experiments involving synthesis, characterisation and measurements in organic chemistry.				
<b>Programme module type:</b>	Compulsory for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry and External Placement. Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in (CH1601 or CH1202) and at least two of CH2501, (CH2601 or CH2603), CH2701			
<b>Anti-requisite(s):</b>	CH3622			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Daily 3- or 4-hour morning practical classes over 5 weeks (Weeks 1-5).			
	<b>Scheduled learning:</b> 90 hours		<b>Guided independent study:</b> 10 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M L Clarke			
<b>Lecturer(s)/Tutor(s):</b>	Dr M L Clarke, Dr I A Smellie			

CH3622 Organic Chemistry Laboratory (Materials)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 12.00 noon or 1.00 pm Mon to Fri (Weeks 1-5)			
Practical experiments involving synthesis, characterisation and measurements in organic chemistry with a particular emphasis on organic materials. Students will perform a selection of the experiments undertaken by CH3621 students in addition to 3-4 special materials experiments.				
<b>Programme module type:</b>	Compulsory for Materials Chemistry, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in (CH2601 or CH2603) and at least one of CH2501 and CH2701			
<b>Anti-requisite(s):</b>	CH3621			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Daily 3- or 4-hour morning practical classes over 5 weeks (Weeks 1-5).			
	<b>Scheduled learning:</b> 90 hours		<b>Guided independent study:</b> 10 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M L Clarke			
<b>Lecturer(s)/Tutor(s):</b>	Dr M L Clarke, Dr I A Smellie			



CH3712 Quantum Theory of Atoms, Molecules and Solids				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module builds on 'Quantum Theory of Atoms, Molecules and Solids. Part I' given in CH2701. It provides an introduction to further, basic concepts of quantum mechanics that are an essential part of the description of the electronic structures of atoms, molecules and solids. While the module is mathematically based, the emphasis throughout is on the physical and chemical implications of the mathematical results and how this provides a coherent, quantitative framework for understanding the beauty and complexities of the electronic structure of atoms, molecules and solids.</p>				
<b>Programme module type:</b>	<p>Compulsory for Chemical Sciences, Chemistry, Materials Chemistry, Chemistry and Geology, Chemistry with External Placement, Chemistry and Physics, Materials Chemistry with External Placement.</p> <p>Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.</p>			
<b>Pre-requisite(s):</b>	Passes in CH2701 and at least one of CH2501 and (CH2601 or CH2603)			
<b>Required for:</b>	CH5714			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr G Haehner			
<b>Lecturer(s)/Tutor(s):</b>	Dr F D Morrison, Dr G Haehner			

## Chemistry - Honours Level - 2014/15 - August 2014

CH3715 Introduction to Analysis of Materials				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The objective of this module is to introduce the principles of the most popular materials analysis methods using X-ray, ion beams, electrons and diffraction methods. The module will cover analytical principles of X-ray photoelectron spectroscopy (XPS) and Auger electron spectroscopy (AES) together with secondary ion mass spectroscopy (SIMS) and X-ray Diffraction methods (XRD). Diffraction techniques will also be covered with the introductory aspects of Electron Energy Loss Spectroscopy (EELS) together with vibrational spectroscopic techniques.				
<b>Programme module type:</b>	Compulsory for Materials Chemistry, Materials Chemistry with External Placement. Optional for Chemistry and Mathematics, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and at least one of CH2501 and (CH2601 or CH2603)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr R T Baker			
<b>Lecturer(s)/Tutor(s):</b>	Dr R T Baker			

CH3716 Quantitative Aspects of Medicinal Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The aim of the module is to cover some of the quantitative aspects of Medicinal Chemistry and drug design. Initially some relevant fundamental thermodynamics will be discussed. The thermodynamics of the drug receptor interactions will then be covered along with other aspects of pharmacology. The pharmacokinetic phase of drug action will be described including the absorption, distribution, metabolism and elimination (ADME) of drugs. The use of computational chemistry in the modern drug design process will then be discussed, covering force field calculations, molecular docking, QSAR and virtual screening.				
<b>Programme module type:</b>	Compulsory for Biomolecular Science, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement.			
<b>Pre-requisite(s):</b>	Passes in at least two of CH2501, CH2601, CH2701			
<b>Anti-requisite(s):</b>	CH3717			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 - 3 lectures per week over 9 - 10 weeks within Weeks 1-11 and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 82 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr T van Mourik			
<b>Lecturer(s)/Tutor(s):</b>	Dr T van Mourik, Dr F M Gray, Prof N J Westwood			

CH3717 Statistical Mechanics and Computational Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module combines the study of statistical mechanics with an introduction to theoretical and computational methods as applied in modern chemistry. In the first set of lectures the molecular basis of thermodynamics is covered in an introduction to the study of statistical mechanics. The use of computational chemistry in the modern drug design process will then be discussed, covering force field calculations, molecular docking, QSAR and virtual screening.				
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry and Geology, Materials Chemistry, Chemistry with External Placement, Chemistry and Physics, Materials Chemistry with External Placement. Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and at least one of CH2501 and (CH2601 or CH2603)			
<b>Anti-requisite(s):</b>	CH3716	<b>Required for:</b>	CH5714	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 - 3 lectures per week over 9 - 10 weeks within Weeks 1-11 and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 83 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr T van Mourik			
<b>Lecturer(s)/Tutor(s):</b>	Dr T van Mourik, Dr J B O Mitchell			

CH3721 Physical Chemistry Laboratory				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 12.00 noon or 1.00 pm Mon to Fri (Weeks 6-10)			
This module comprises practical experiments involving physical measurements and the use of computational programmes in Chemistry.				
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry and Geology, Chemistry with Medicinal Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry and External Placement, Materials Chemistry, Materials Chemistry with External Placement, Chemistry and Physics. Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and at least one of CH2501 and (CH2601 or CH2603)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Daily 3- or 4-hour morning practical classes over 5 weeks (Weeks 6-10).			
	<b>Scheduled learning:</b> 90 hours		<b>Guided independent study:</b> 10 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof P A Wright			
<b>Lecturer(s)/Tutor(s):</b>	Prof P A Wright, Prof M Buck, Dr R Schaub, Dr T van Mourik, Prof M Buehl			

## Chemistry - Honours Level - 2014/15 - August 2014

CH4441 External Placement				
<b>SCOTCAT Credits:</b>	90	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students on Chemistry degree programmes with External Placement			
<b>Planned timetable:</b>	Please Contact School			
This module is intended to provide each individual student with direct experience of work in an industrial or similar laboratory. Activities are very varied, according to the nature of the particular company's or organisation's area of business. Some students will be engaged in synthetic work and some in analytical/measurement activities. Some will be based exclusively in a laboratory, while others will also be involved in liaison with the company's plant operators or with its customers.				
<b>Programme module type:</b>	Compulsory for Chemistry with External Placement, Chemistry with French with External Placement, Chemistry with Medicinal Chemistry and External Placement, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in at least two of CH2501, (CH2601 or CH2603), CH2701			
<b>Co-requisite(s):</b>	CH4454 and CH4455 and (CH4453 or CH4456) or FR5810			
<b>Learning and teaching methods and delivery:</b>	<b>This is a Study Abroad or Work Placement module.</b>			
	<b>Weekly contact:</b> Day-to-day supervision by company supervisor, liaising with member of School academic staff.			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr G Haehner			

CH4442 Chemistry Research Project				
<b>SCOTCAT Credits:</b>	50	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	2 days per week, to be arranged.			
The research project at Level 4000 aims to develop the students' skills in the following areas: experimental design and problem-solving; abstraction, evaluation and interpretation of data in the chemical literature; practical skills and teamwork; communication of results orally and in a dissertation. The project will be selected and supervised by a member of the academic staff.				
<b>Programme module type:</b>	Compulsory for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry with Medicinal Chemistry, Chemistry with French, Materials Chemistry, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in at least two of CH2501, (CH2601 or CH2603), CH2701			
<b>Anti-requisite(s):</b>	CH4441, CH4444 - CH4449, ID4441			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students spend a minimum of 22.5 hours per week of their time on the project through semesters 1 and 2. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 15 to 17 hours per week are laboratory related.			
	<b>Scheduled learning:</b> 340 hours		<b>Guided independent study:</b> 160 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 1-hour Practical Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr T van Mourik and Dr R Schaub			

CH4444 Chemistry Research Project for Non-graduating Students (60)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	1 & 2 (taught twice)
<b>Availability restrictions:</b>	Available only for Non-graduating Students			
<b>Planned timetable:</b>	To be arranged.			
The research project at Level 4000 aims to develop the students' skills in the following areas: experimental design and problem-solving; abstraction, evaluation and interpretation of data in the chemical literature; practical skills and teamwork; communication of results orally and in a dissertation. The project will be selected and supervised by a member of the academic staff.				
<b>Programme module type:</b>	Available only for Non-graduating Students			
<b>Anti-requisite(s):</b>	CH4442, CH4445 - CH4449, ID4441, CH5441			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students spend a minimum of 54 hours of their time on the project. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 36 hours are laboratory related.			
	<b>Scheduled learning:</b> 400 hours		<b>Guided independent study:</b> 200 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 1-hour Practical Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr T van Mourik and Dr R Schaub			

## Chemistry - Honours Level - 2014/15 - August 2014

CH4445 Chemistry Research Project for Non-graduating Students (90)				
<b>SCOTCAT Credits:</b>	90	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only for Non-graduating Students			
<b>Planned timetable:</b>	To be arranged.			
The research project at Level 4000 aims to develop the students' skills in the following areas: experimental design and problem-solving; abstraction, evaluation and interpretation of data in the chemical literature; practical skills and teamwork; communication of results orally and in a dissertation. The project will be selected and supervised by a member of the academic staff.				
<b>Programme module type:</b>	Available only for Non-graduating Students			
<b>Anti-requisite(s):</b>	CH4442, CH4444, CH4446 - CH4449, ID4441, CH5441			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students spend a minimum of 40 hours per week of their time on the project. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 27 to 28 hours per week are laboratory related.			
	<b>Scheduled learning:</b> 600 hours		<b>Guided independent study:</b> 300 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 2-hour Practical Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr T van Mourik and Dr R Schaub			

CH4446 Chemistry Research Project for Non-graduating Students (120)				
<b>SCOTCAT Credits:</b>	120	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only for Non-graduating Students			
<b>Planned timetable:</b>	To be arranged.			
The research project at Level 4000 aims to develop the students' skills in the following areas: experimental design and problem-solving; abstraction, evaluation and interpretation of data in the chemical literature; practical skills and teamwork; communication of results orally and in a dissertation. The project will be selected and supervised by a member of the academic staff.				
<b>Programme module type:</b>	Available only for Non-graduating Students			
<b>Anti-requisite(s):</b>	CH4442 - CH4445, CH4448, CH4449, ID4441, CH5441			
<b>Co-requisite(s):</b>		<b>Required for:</b>		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students spend a minimum of 54 hours per week of their time on the project. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 36 hours per week are laboratory related.			
	<b>Scheduled learning:</b> 800 hours		<b>Guided independent study:</b> 400 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 2-hour Practical Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr T van Mourik and Dr R Schaub			

CH4448 Chemistry Project for Chemistry and Geology				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students on Chemistry and Geology degree programme			
<b>Planned timetable:</b>	To be arranged.			
The research project at Level 4000 aims to develop the students' skills in the following areas: experimental design and problem-solving; abstraction, evaluation and interpretation of data in the chemical literature; practical skills and teamwork; communication of results orally and in a dissertation.				
<b>Programme module type:</b>	Either (ES4010 and CH4448) or ID4441 are compulsory for Chemistry and Geology.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and CH2701	<b>Co-requisite(s):</b>	ES4010	
<b>Anti-requisite(s):</b>	CH4442, CH5441, ID4441			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students spend a minimum of 18 hours per week of their time on the project. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 12 to 13 hours per week are laboratory related.			
	<b>Scheduled learning:</b> 135 hours		<b>Guided independent study:</b> 65 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 30-minute Practical Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr T van Mourik and Dr R Schaub			

CH4449 Chemistry Research Project for Non-graduating Students (20)				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to Non-graduating Students where there is a specific degree programme requirement. Permission to take this module is required from the Director of Teaching.			
<b>Planned timetable:</b>	To be arranged.			
The research project at Level 4000 aims to develop the students' skills in the following areas: experimental design and problem-solving; abstraction, evaluation and interpretation of data in the chemical literature; practical skills and teamwork; communication of results orally and in a dissertation. The project will be selected and supervised by a member of the academic staff.				
<b>Programme module type:</b>	With permission, and only for Non-graduating Students			
<b>Anti-requisite(s):</b>	CH4442 - CH4448, CH5441, ID4441			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students spend a minimum of 9 hours per week of their time on the project. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 6 to 7 hours per week are laboratory related.			
	<b>Scheduled learning:</b> 135 hours		<b>Guided independent study:</b> 65 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 30-minute Oral Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr T van Mourik and Dr R Schaub			
<b>Lecturer(s)/Tutor(s):</b>	Teaching staff			

## Chemistry - Honours Level - 2014/15 - August 2014

CH4453 Chemistry Distance Learning (Materials Chemistry)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students on the MChem Materials Chemistry, MChem Materials Chemistry with External Placement and BSc Materials Chemistry degree programmes.			
<b>Planned timetable:</b>	n/a - Distance Learning			
This distance-learning module allows students to develop an advanced understanding of the basic concepts of Materials Chemistry. It aims to build on students' fundamental knowledge of metals and ceramics.				
<b>Programme module type:</b>	Compulsory for MChem in Materials Chemistry, MChem in Materials Chemistry with External Placement, BSc Materials Chemistry.			
<b>Pre-requisite(s):</b>	Passes in at least two of CH2501, (CH2601 or CH2603), CH2701			
<b>Co-requisite(s):</b>	For programmes with an External Placement: CH4441 and CH4454 and CH4455	<b>Anti-requisite(s):</b>	CH4452	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Distance learning			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 100 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr F M Gray			
<b>Lecturer(s)/Tutor(s):</b>	Dr F D Morrison, Dr R T Baker			

CH4454 Chemistry Distance Learning (Physical Chemistry)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students on the MChem Chemistry with External Placement, MChem Chemistry with Medicinal Chemistry and External Placement and MChem Materials Chemistry with External Placement degree programmes.			
<b>Planned timetable:</b>	n/a - Distance learning			
This module offers the material covered by level 4000 BSc/MChem module CH4714 in a distance learning mode to students on the MChem one-year placement. See the module description for CH4714 for details of module content.				
<b>Programme module type:</b>	Compulsory for MChem Chemistry with External Placement, MChem Chemistry with Medicinal Chemistry and External Placement and MChem Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and at least one of CH2501, (CH2601 or CH2603)			
<b>Co-requisite(s):</b>	CH4441, CH4455 and (CH4456 or CH4453)	<b>Anti-requisite(s):</b>	CH4714, CH4451	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Distance Learning			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 100 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr F M Gray			
<b>Lecturer(s)/Tutor(s):</b>	Dr F M Gray			



CH4455 Chemistry Distance Learning (Inorganic Chemistry)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students on the MChem Chemistry with External Placement, MChem Chemistry with Medicinal Chemistry and External Placement and MChem Materials Chemistry with External Placement degree programmes.			
<b>Planned timetable:</b>	n/a - Distance learning			
This module offers the material covered by level 4000 BSc/MChem module CH4514 in a distance learning mode to students on the MChem one-year placement. See the module description for CH4514 for details of module content.				
<b>Programme module type:</b>	Compulsory for MChem Chemistry with External Placement, MChem Chemistry with Medicinal Chemistry and External Placement and MChem Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Co-requisite(s):</b>	CH4441, CH4454 and (CH4456 or CH4453)	<b>Anti-requisite(s):</b>	CH4514, CH4451	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Distance Learning			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 100 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr F M Gray			
<b>Lecturer(s)/Tutor(s):</b>	Prof S Nolan, Dr B Bode			

CH4456 Chemistry Distance Learning (Organic Chemistry)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students on the MChem Chemistry with External Placement and MChem Chemistry with Medicinal Chemistry and External Placement degree programmes.			
<b>Planned timetable:</b>	n/a - Distance Learning			
This module offers the material covered by level 4000 BSc/MChem module CH4614 in a distance learning mode to students on the MChem one-year placement. See the module description for CH4614 for details of module content.				
<b>Programme module type:</b>	Compulsory for MChem Chemistry with External Placement and MChem Chemistry with Medicinal Chemistry and External Placement.			
<b>Pre-requisite(s):</b>	Passes in (CH2601 or CH2603) and at least one of CH2501, CH2701			
<b>Co-requisite(s):</b>	CH4441 and CH4454 and CH4455	<b>Anti-requisite(s):</b>	CH4614, CH4451	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Distance Learning			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 100 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr F M Gray			
<b>Lecturer(s)/Tutor(s):</b>	Dr R A Aitken, Dr E Kay			

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CH4461 Integrating Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This is a general chemistry module aimed at developing and consolidating fundamental aspects of basic understanding. Students will be encouraged to gain a deeper understanding of elementary core material by a combination of discussion, general reading, essay work and problem solving at a more advanced level than previously required. Students will be expected to read externally on related topics. In addition, each student will be required to submit an essay which will be on a topic relevant to the broader issues of chemical study and knowledge. The problems will apply the knowledge gained in Level 2000 Chemistry modules.</p>				
<b>Programme module type:</b>	Compulsory for Chemistry BSc, Chemistry with Medicinal Chemistry BSc, Materials Chemistry BSc. Optional for Chemistry with French BSc.			
<b>Pre-requisite(s):</b>	Passes in CH2501, (CH2601 or CH2603), CH2701			
<b>Anti-requisite(s):</b>	CH5461			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 classes per week over 9 weeks (Weeks 3-11) and a total of 3 x 1-hour seminars			
	<b>Scheduled learning:</b> 21 hours		<b>Guided independent study:</b> 79 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr F D Morrison			
<b>Lecturer(s)/Tutor(s):</b>	all staff			

CH4514 Advanced Metal Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module covers the heavier d-block and f-block metals and also the theory behind bonding, magnetism and electronic spectroscopy in d-block metal complexes. At the end of the module students should be in a position to understand fully the nature of bonding in d- and f-block metal systems, to understand the electronic spectra of d-block complexes and to rationalise trends in chemical properties both down and across the periodic table. The module also aims to explore the role played by inorganic systems in biology and their growing importance in medicine. There will also be discussion of the mechanisms of action of some inorganic systems in biology.</p>				
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry, Chemistry with French MChem, Materials Chemistry. Optional for Chemistry and Geology, Chemistry and Mathematics, Chemistry with French BSc, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Anti-requisite(s):</b>	CH4451, CH4511, CH4455			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr B E Bode			
<b>Lecturer(s)/Tutor(s):</b>	Prof S P Nolan, Dr B E Bode			

CH4515 Advanced Main Group Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module discusses the importance of and structural similarities between rings, cages and clusters particularly in main group chemistry. The general rules for predicting geometry in cage/cluster systems will be introduced and used to provide a framework for the range of systems to be discussed e.g. boranes, Zintl anions, phosphides. Further advanced topics in s and p block chemistry will be introduced, for example the stabilisation of heavier main group multiple bonds, low coordinate main group element centres, biradicaloids and use of weakly coordinating anions.				
<b>Programme module type:</b>	Compulsory for Materials Chemistry, Chemistry with Medicinal Chemistry MChem. Optional for Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry with French, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Anti-requisite(s):</b>	CH5513			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr P Kilian			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Kilian			

CH4612 Blockbuster Pharmaceuticals				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The module will discuss case studies from the most successful pharmaceutical products. How the compounds came to be discovered, what diseases they are targeting, how they work and how they are made and delivered to the market. Compounds that will feature are aspirin, penicillin, AZT, 5-fluorouracil, Zantac, viagra, $\beta$ -blockers, prozac etc.				
<b>Programme module type:</b>	Compulsory for Chemistry with Medicinal Chemistry. Optional for Biomolecular Science, Chemical Sciences, Chemistry and Mathematics, Chemistry MChem, Chemistry with French, Chemistry with Mathematics			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Anti-requisite(s):</b>	CH5615			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total, plus a half day site visit.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof D O'Hagan			
<b>Lecturer(s)/Tutor(s):</b>	Prof D O'Hagan and visiting industrial lecturers			

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CH4614 Heterocyclic and Pericyclic Chemistry			
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
<p>This module covers the important areas of heterocyclic and pericyclic chemistry in detail. In heterocyclic chemistry, the nomenclature and numbering of single and fused ring systems, and structure, reactivity, synthesis and applications of the main five and six-membered ring systems with one and two heteroatoms will be covered. Selected industrial syntheses of heterocyclic medicinal compounds are used to illustrate the basic principles as well as the factors to be considered in large scale synthesis. In pericyclic chemistry, a frontier molecular orbital approach based on the Woodward-Hoffmann rules will be applied to pericyclic reactions and used to provide an understanding of the energetics and stereochemistry of Diels-Alder and 1,3-dipolar cycloaddition reactions as well as electrocyclic processes and sigmatropic rearrangements. Synthetic applications of these processes will also be illustrated.</p>			
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry with French MChem, Chemistry with Medicinal Chemistry. Optional for Biomolecular Science, Chemistry and Mathematics, Chemistry with French BSc, Chemistry with Mathematics.		
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)		
<b>Anti-requisite(s):</b>	CH4611, CH4451, CH4456		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total, plus a half-day site visit.		
	<b>Scheduled learning:</b> 20 hours	<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%		
<b>Module Co-ordinator:</b>	Dr R A Aitken		
<b>Lecturer(s)/Tutor(s):</b>	Dr R A Aitken, Dr E R Kay		

CH4615 Fragrance, Food and Colour Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module considers three areas where applications of organic chemistry have been able to benefit society and given rise to important industries. The fragrance, perfumery and food flavouring industry will be covered from the early extraction of essential oils to the modern marketplace with an overview of the key structural features required for perfumes and flavours and some major manufacturing processes. The chemical constituents of food will be considered with an emphasis on health effects and the molecular mechanism of antioxidants, vitamins and other food constituents. The chemistry of organic dyes and pigments will be discussed including the historical development of colour compounds and how these affected society and art. Coloured compounds in nature will also be discussed.</p>				
<b>Programme module type:</b>	Compulsory for Chemistry with Medicinal Chemistry. Optional for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry with French, Chemistry with Mathematics, Sustainable Development.			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701, or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Anti-requisite(s):</b>	CH4613			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr R A Aitken			
<b>Lecturer(s)/Tutor(s):</b>	Dr R A Aitken, Dr R J M Goss, Dr T K Smith			

## Chemistry - Honours Level - 2014/15 - August 2014

CH4713 Interactions of Light with Matter				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module describes the fascinating properties of matter relevant to their interaction with electromagnetic radiation. Absorption, transmission, reflection and diffraction of light across the electromagnetic spectrum is covered. The properties of matter, particularly in the gas and solid phases, which are important for the emission, modification and transport of light are discussed at the atomic and molecular level.				
<b>Programme module type:</b>	Compulsory for Materials Chemistry, Chemistry and Physics. Optional for Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry with French, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and at least one of CH2501, (CH2601 or CH2603)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr R Schaub			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Buehl, Dr R Schaub			

CH4714 Conductivity, Electrochemical Processes and the Structure of Polymers				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module covers electrolyte solutions and ionic conductivity, equilibrium electrochemistry and electrode processes, and, the synthesis, classification and structure of polymers.				
<b>Programme module type:</b>	Compulsory for Chemical Sciences, Chemistry, Chemistry with French, Materials Chemistry, Chemistry with Medicinal Chemistry, Chemistry and Physics. Optional for Chemistry and Geology, Chemistry and Mathematics, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Anti-requisite(s):</b>	CH4451, CH4454, CH4711			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr F M Gray			
<b>Lecturer(s)/Tutor(s):</b>	Dr F M Gray			

CH4715 Functional Materials and Electrons in Solids				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The module introduces the physical concepts of dielectrics, semiconductors, and metals. Electronic properties of interfaces and thin films which are fundamental to devices such as microprocessors, lasers in CD players, or solar cells will be discussed.				
<b>Programme module type:</b>	Compulsory for Materials Chemistry, Chemistry and Physics. Optional for Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry and Geology, Chemistry with French, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Either: passes in CH2701 and at least one of CH2501, (CH2601 or CH2603)			
<b>Anti-requisite(s):</b>	CH5712			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr F D Morrison			
<b>Lecturer(s)/Tutor(s):</b>	Dr F D Morrison, Prof M. Buck			

CH5441 Research Project				
<b>SCOTCAT Credits:</b>	50	SCQF Level 11	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	2 days per week, to be arranged.			
The research project at Level 5000 of the MChem and MSci programmes aims to develop the students' skills in the following areas: experimental design and problem-solving; abstraction, evaluation and interpretation of data in the chemical literature; practical skills and teamwork; communication of results orally and in a dissertation. The project is supervised by a member of the academic staff. The project topic and aims will be selected by both supervisor and student and a literature survey will be carried out.				
<b>Programme module type:</b>	Compulsory for Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics, Chemistry with Medicinal Chemistry MChem, Chemistry MChem, Chemistry with Medicinal Chemistry and External Placement, Chemistry and Physics MSci(or PH5101), Materials Chemistry with External Placement, Materials Chemistry MChem.			
<b>Pre-requisite(s):</b>	Passes in at least two of CH2501, (CH2601 or CH2603), CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students spend a minimum of 22.5 hours per week of their time on the project through semesters 1 and 2. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 15 to 17 hours per week are laboratory related.			
	<b>Scheduled learning:</b> 340 hours		<b>Guided independent study:</b> 160 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 1-hour Practical Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr T van Mourik and Dr R Schaub			
<b>Lecturer(s)/Tutor(s):</b>	all staff			

## Chemistry - Honours Level - 2014/15 - August 2014

CH5461 Integrating Chemistry			
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
<p>This is a general chemistry module aimed at developing and consolidating fundamental aspects of basic understanding. Students will be encouraged to gain a deeper understanding of elementary core material by a combination of discussion, general reading, essay work and problem solving at a more advanced level than previously required. Students will be expected to read externally on related topics. In addition, each student will be required to submit an essay which will be on a topic relevant to the broader issues of chemical study and knowledge. The problems will apply the knowledge gained in Level 2000 Chemistry modules.</p>			
<b>Programme module type:</b>	Compulsory for Chemistry MChem, Chemistry with Medicinal Chemistry MChem, Chemistry with Medicinal Chemistry and External Placement, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics, Materials Chemistry MChem, Materials Chemistry with External Placement.		
<b>Pre-requisite(s):</b>	Passes in CH2501, (CH2601 or CH2603), CH2701		
<b>Anti-requisite(s):</b>	CH4461		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 classes per week over 9 weeks (Weeks 3-11) and a total of 3 x 1-hour seminars.		
	<b>Scheduled learning:</b> 21 hours	<b>Guided independent study:</b> 79 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr F D Morrison		
<b>Lecturer(s)/Tutor(s):</b>	all staff		



CH5511 Homogeneous Catalysis				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module discusses the use of metal based systems in organic transformations and a detailed treatment of homogeneous catalysis. Important processes in the petrochemicals industry will be used to exemplify the principles described.				
<b>Programme module type:</b>	Compulsory for Chemistry MChem, Chemistry with External Placement, Chemistry with Medicinal Chemistry MChem, Chemistry with Medicinal Chemistry and External Placement. Optional for Chemistry with French MChem, Chemistry with French and External Placement, Chemistry with Mathematics, Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof P C J Kamer			
<b>Lecturer(s)/Tutor(s):</b>	Prof P C J Kamer, Prof R P Tooze			

CH5516 Advanced Ligand Design				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Phosphines and carbenes represent the most common ligands used in many applications of metal complexes. Recent developments have allowed very precise design of properties of complexes as a result of new ligand design. In this module design principles will be addressed and applications of these important complexes in industry will be discussed.				
<b>Programme module type:</b>	Optional for Chemical Sciences, Chemistry, Chemistry with French MChem, Chemistry with External Placement, Chemistry with Medicinal Chemistry MChem, Chemistry with French and External Placement, Chemistry with Mathematics, Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr C S J Cazin			
<b>Lecturer(s)/Tutor(s):</b>	Prof P C J Kamer, Dr C S J Cazin			

## Chemistry - Honours Level - 2014/15 - August 2014

CH5517 Advanced Molecular Inorganic Chemistry				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module involves three sections: advanced discussion of the properties of selected main group compounds, spectroscopy and magnetism of transition metal complexes, and molecular modeling applied to transition metal complexes.				
<b>Programme module type:</b>	Optional for Chemical Sciences, Chemistry, Chemistry with French MChem, Chemistry with External Placement, Chemistry with Medicinal Chemistry MChem, Chemistry with French and External Placement, Chemistry with Mathematics, Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr E Zysman-Colman			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Buehl, Dr E Zysman-Colman, Dr B Bode			

CH5518 Blockbuster Solids				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module covers two major topics. The first deals with modern materials which have a major impact on our lives, focusing on how the material's structure influences its electrical, magnetic and thermal properties. In the second section, emphasis will be placed on metal organic frameworks and how they can be used for the storage and release of gases.				
<b>Programme module type:</b>	Compulsory for Chemistry and Geology. Optional for Chemical Sciences, Chemistry, Chemistry with French MChem, Chemistry with External Placement, Chemistry with Medicinal Chemistry MChem, Chemistry with French and External Placement, Chemistry with Mathematics, Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof P Lightfoot			
<b>Lecturer(s)/Tutor(s):</b>	Prof P Lightfoot, Prof R E Morris			

CH5611 Asymmetric Synthesis				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module discusses the methods available for the synthesis of chiral compounds. After a detailed introduction to the specialised terminology and analytical methods used, the main methods using chiral auxiliaries, chiral reagents and chiral catalysts will be described. This will then be combined with a consideration of synthetic strategy and total syntheses of several complex chiral compounds will be discussed.				
<b>Programme module type:</b>	Compulsory for Chemistry with Medicinal Chemistry, Chemistry MChem, Chemistry with External Placement, Chemistry with Medicinal Chemistry and External Placement. Optional for Biomolecular Science, Chemistry with French MChem, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr M L Clarke			
<b>Lecturer(s)/Tutor(s):</b>	Dr M L Clarke, Prof A D Smith			

CH5612 Natural Products, Biosynthesis and Enzyme Co-factors				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The module will investigate the biosynthesis of the main natural products groups (polyketides, terpenes, alkaloids). Unifying features of their structures and biosynthesis will be described and methods for studying the biosynthesis of natural products will be taught (isotope tracer methods). The common enzyme co-factors (PLP, TPP, NADH, co-enzyme B12) will be highlighted and their mechanistic role in mediating enzymatic transformations will be explored.				
<b>Programme module type:</b>	Compulsory for Chemistry with Medicinal Chemistry MChem, Chemistry with Medicinal Chemistry and External Placement. Optional for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry BSc, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof D O'Hagan			
<b>Lecturer(s)/Tutor(s):</b>	Prof D O'Hagan, Dr T K Smith, Dr G J Florence			

## Chemistry - Honours Level - 2014/15 - August 2014

CH5613 Reactive Intermediates				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Aspects of the organic chemistry of the most important reactive intermediates viz.: carbo-cations, carbanions, free radicals, carbenes, nitrenes and arynes will be covered. Means of generating each type of reactive intermediate will be introduced. The key reactions of each intermediate will be reviewed and their characteristic reactions highlighted. An understanding of the use of each species in organic synthesis and of their significance in mechanistic analysis will be developed.				
<b>Programme module type:</b>	Compulsory for Chemistry with Medicinal Chemistry MChem, Chemistry with Medicinal Chemistry and External Placement. Optional for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry BSc, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr R A Aitken			
<b>Lecturer(s)/Tutor(s):</b>	Dr R A Aitken, Dr I A Smellie			

CH5614 Chemical Biology				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module will examine new methodologies for drug discovery. An overview of the processes of target discovery, lead discovery and lead optimisation will be given. The use of structural biology (protein crystallography, NMR), computational chemistry and combinatorial chemistry in 'rational drug design' will be described. The module will look at the technologies behind combinatorial library design, synthesis and high throughput screening. Broad and focused libraries will be discussed. Several examples will be explored, such as the development of drugs against AIDS and influenza.				
<b>Programme module type:</b>	Compulsory for Chemistry with Medicinal Chemistry MChem, Chemistry with Medicinal Chemistry and External Placement. Optional for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry BSc, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof J H Naismith			
<b>Lecturer(s)/Tutor(s):</b>	Prof J H Naismith, Prof N J Westwood			

CH5616 Molecular Recognition				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module offers a systematic introductory treatment of molecular recognition, emphasising fundamental concepts of intermolecular interactions and molecular recognition in solution. The nature, strength and directionality of orbital, hydrogen-bonding and hydrophobic interactions will be explored. Spectroscopic and other techniques for studying these interactions will be outlined with examples.				
<b>Programme module type:</b>	Compulsory for Chemistry with Medicinal Chemistry MChem, Chemistry with Medicinal Chemistry and External Placement. Optional for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry BSc, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics.			
<b>Pre-requisite(s):</b>	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof D Philp			
<b>Lecturer(s)/Tutor(s):</b>	Prof D Philp, Dr E R Kay			

CH5711 Advanced Spectroscopic Methods				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module describes the importance of more advanced spectroscopic methods for the elucidation of structure and properties of increasingly complex molecules and materials. Particular attention will be paid to those techniques which exploit synchrotron radiation.				
<b>Programme module type:</b>	Compulsory for Chemistry MChem, Chemistry with External Placement, Chemistry with Mathematics. Optional for Chemistry and Geology, Chemistry with French MChem, Chemistry with French and External Placement, Chemistry and Physics, Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and CH2501			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials per week.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof M Buck			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Buck, Dr G Haehner			

## Chemistry - Honours Level - 2014/15 - August 2014

CH5713 Surface Science and Heterogeneous Catalysis				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The module describes the Chemistry of solid surfaces with particular reference to the structure of metal, oxide and semiconductor surfaces. The techniques available to characterise the uppermost atomic layers of a solid are presented and the novel reactivity of surfaces is linked to applications in sensors, electronic devices, heterogeneous catalysis as well as the processes of corrosion, friction and wear.				
<b>Programme module type:</b>	Compulsory for Chemistry with Mathematics. Optional for Chemical Sciences, Chemistry, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry and Physics, Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and CH2501			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr C J Baddeley			
<b>Lecturer(s)/Tutor(s):</b>	Dr C J Baddeley, Prof P A Wright			

CH5714 Chemical Applications of Electronic Structure Calculations				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module will build on the foundations laid in CH2701 and CH3712 and introduce further aspects and methods of modern computational chemistry related to the electronic structures of atoms and molecules. It will be shown how results of such calculations can be used to complement, interpret, and guide experiments in many areas of chemistry.				
<b>Programme module type:</b>	Compulsory for Chemistry with Mathematics. Optional for Chemical Sciences, Chemistry, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry and Physics, Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2701, CH2501, CH3712 and CH3717			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof M Buehl			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Buehl, Dr J B O Mitchell			

CH5715 Energy Conversion and Storage				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
In our efforts to mitigate global warming it is essential to develop new and improved methods of generation and storage of energy. Foremost among these methods are the electrochemical technologies of batteries and fuel cells. In this module we will discuss the technical details and applications of such devices. Particular emphasis will be placed on the underlying electrochemistry and materials chemistry.				
<b>Programme module type:</b>	Compulsory for Chemistry with Mathematics, Materials Chemistry MChem, Materials Chemistry with External Placement. Optional for Chemical Sciences, Chemistry, Chemistry and Geology, Chemistry with External Placement, Chemistry with French MChem, Chemistry with French and External Placement, Chemistry and Physics.			
<b>Pre-requisite(s):</b>	Passes in CH2701 and CH2501	<b>Anti-requisite(s):</b>	CH4712	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-Hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr R T Baker			
<b>Lecturer(s)/Tutor(s):</b>	Dr R T Baker, Prof J T S Irvine			

CH5716 Processing of Materials				
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module focuses on the processing of materials. Fundamental materials properties such as crystallinity, composition, crystal phase, phase mixing, domain structure, grains and grain boundaries, porosity and pore structure will be covered and the main methods used to control these properties in order to develop and improve materials for specific applications will be addressed. Processes including casting, extrusion, physical and chemical vapour deposition, calcination, sintering, annealing, plasma treatments, mechanical working, crystallisation and dopant addition will be described and explained. Applications in high-value metals, ceramics and semiconductor materials will be emphasised.				
<b>Programme module type:</b>	Compulsory for Materials Chemistry MChem, Materials Chemistry with External Placement.			
<b>Pre-requisite(s):</b>	Passes in CH2701, CH2501 and CH3513			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof J T S Irvine			
<b>Lecturer(s)/Tutor(s):</b>	Prof J T S Irvine, Dr M Cassidy			

Chemistry - Honours Level - 2014/15 - August 2014

CH5717 Nanostructured Materials			
<b>SCOTCAT Credits:</b>	10	SCQF Level 11	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
<p>This module will introduce the concepts and science behind the design and synthesis of a wide range of nanostructures and the application of these structures in functional materials and devices. The relationship between nanoscale structure and composition and macroscale properties and behaviour will be emphasised. Structures will be classified and introduced in terms of their number of dimensions: clusters, nanoparticles and quantum dots (0-D); nanotubes, nanowires and nanorods (1-D); nanosheets and films (2-D); and porous crystals, mesoporous structures and metal-organic frameworks (3-D). Other specific topics will include the science of clusters, molecular assemblies and assemblies of nanostructures. Novel carbon based materials, including simple and functionalised fullerenes, carbon nanotubes and graphene and related materials will be described and their physical and chemical properties related to their structure and bonding. Advanced characterisation techniques and applications related to nanotechnology, MEMs, biomaterials, catalysis, and optical and magnetic devices will be addressed.</p>			
<b>Programme module type:</b>	<p>Compulsory for Materials Chemistry MChem, Materials Chemistry with External Placement.</p> <p>Optional for Chemical Sciences, Chemistry and Geology, Chemistry MChem, Chemistry with French MChem, Chemistry with External Placement, Chemistry with French and External Placement, Chemistry with Mathematics, Chemistry and Physics.</p>		
<b>Pre-requisite(s):</b>	Passes in CH2701 and CH2501		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.		
	<b>Scheduled learning:</b> 20 hours	<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<p><b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%</p>		
	<p><b>As used by St Andrews:</b> 2-hour Written Examination = 100%</p>		
<b>Module Co-ordinator:</b>	Prof W Zhou		
<b>Lecturer(s)/Tutor(s):</b>	Prof W Zhou, Prof M Buck		



## School of Classics

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Ancient History (AN) modules

AN3020 Principles and Techniques in Archaeology			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Available only to students in Honours Ancient History and Archaeology or Honours Mediaeval History and Archaeology		
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Thu		
<p>This module, which draws on archaeological material from around the world, is divided into two sections. The first is a series of seminars and lectures on the central practical concerns of archaeology: the way in which the type of excavation affects the resulting evidence; methods of studying sites and artefacts; how to publish archaeological material, and the importance of conservation. This will give a general grounding to enable students to understand archaeological reports, and to apply this understanding to other parts of the Honours degree. The second part will address the important contribution of theoretical archaeology to the discipline, while also elucidating the practical applications and relevance of theory.</p>			
<b>Programme module type:</b>	Compulsory for Ancient History and Archaeology, Mediaeval History and Archaeology		
<b>Pre-requisite(s):</b>	2 of AN2002, AN2003, CL2003, CL2004 - with passes at grade 11 or better in both. OR ME2003 - with a pass at grade 11 or better and 1 of AN2003 or HI2001 or MH2002 or MO2008.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours of lectures and seminars.		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr R J Sweetman		
<b>Lecturer(s)/Tutor(s):</b>	Dr R J Sweetman, Dr J Coulston, Prof G Woolf		

Classics - Honours Level - 2014/15 - August 2014

AN4121 The Ancient City of Rome			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Thu		
This module examines the history and archaeology of the city of Rome from its earliest beginnings to the fifth century CE. Several themes are pursued, in particular the view of Rome as a centre of power and patronage, the capital of empire and residence of kings and emperors. Rome's physical development, the problems of feeding and administering such an immense ancient city, the architectural and artistic implications of rulers' aspirations, and the urban religions are all explored.			
<b>Programme module type:</b>	Optional for all Ancient History Degrees, Ancient History and Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History, Mediaeval History and Archaeology, Scottish History		
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours of lectures and seminars.		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Dr J Coulston		
<b>Lecturer(s)/Tutor(s):</b>	Dr J Coulston		

<b>AN4127 In the Footsteps of the Ancients: Exploring the Archaeology and Topography of Greece</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Wed			
<p>Through on-site teaching in Greece and home lectures, this course studies how and why Greek secular and religious sites developed where they did, what their different functions may have been (in relation to architecture/topography), how these changed over time, and what important interactions existed within and between secular and religious sites. On-site teaching will also allow treatment of the nature of site-excavation and its impact on interpretation, as well as development of students' own interpretations and illustration of contemporary topics such as the values of restoration, conservation and presentation of archaeology. The module will provide a broad yet detailed examination of Greek society and culture from Prehistoric to modern times. There will be ca. 11 days of visits to sites and museums in Athens, Attica, Central Greece and the Peloponnese; these include the Athenian Acropolis and Agora, Delphi, Ossiou Loukas, Mycenae, Sparta, Mistras, and Olympia. The module is assessed by an on-site oral presentation and accompanying written submission, a research diary and written site case-study.</p>				
<b>Programme module type:</b>	Optional for all Ancient History Degrees, Ancient History and Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History, Mediaeval History and Archaeology, Scottish History			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 12 hours of lectures and seminars in St Andrews; 90 hours on-site lectures and seminars in Greece.			
	<b>Scheduled learning:</b> 102 hours		<b>Guided independent study:</b> 198 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%			
	<b>As used by St Andrews:</b> Coursework = 100% (on-site presentation, 25%; written submission of presentation, 15%; research diary, 20%; site study, 40%)			
<b>Module Co-ordinator:</b>	Dr R Sweetman			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Sweetman			

## Classics - Honours Level - 2014/15 - August 2014

AN4130 The Roman Army				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu			
<p>This module will present material for the history and archaeology of the Roman army from the Early Republic through to the Late Empire. Students will study a series of themes, including institutional development, expansion and defence of the Roman empire, the army and political culture, the army in battle, soldiers within Roman society, the archaeology of self-identity, and the Roman military economy. Source material will include historical and epigraphic texts, archaeological sites and finds, and Roman iconography. The Roman army was the first truly 'professional' standing army in European history. It permeated Roman economy and society, and has subsequently fascinated historians, soldiers, political scientists and artists up to the present.</p>				
<b>Programme module type:</b>	Optional for all Ancient History Degrees, Ancient History and Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History, Mediaeval History and Archaeology, Scottish History			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours of lectures and seminars.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J Coulston			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Coulston			

AN4131 The Roman Economy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue			
<p>This module looks at the material base of life in Italy and the provinces during the Roman empire, roughly the first three centuries C.E. Using archaeological material such as ship wrecks, surface survey and studies of container amphorae, combined with inscriptions, papyri and literary texts, the course aims through a series of case studies to build up a picture of how wealth was created, how goods were produced and transported around the empire and the impact on local societies and peasantries of the economic demands of empire and city, landowner and soldier.</p>				
<b>Programme module type:</b>	Optional for all Ancient History Degrees, Ancient History and Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 10%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-Hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof G Woolf			
<b>Lecturer(s)/Tutor(s):</b>	Prof G Woolf			

AN4146 The Supremacy of Greece: Athens and Sparta 479 - 362 BCE				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Tue			
<p>Between 479 and 362 BCE Athens, Sparta and later Thebes and Thessaly contested the rule of Greece through imperial expansion and ideological dominance, leading to both constant warfare as the states struggled for power, and huge progress in philosophy and the arts brought about by the force of competition. This module studies the fifth- and fourth-century empires of Athens and Sparta and their effects on the Greek world at large. The period is exceptionally rich in sources - the histories of Thucydides and Xenophon, Athenian tragedy and comedy, inscriptions, coinage and art - and the module uses these to investigate themes such as political development and dissent, the relations between Greeks and outsiders, and the expression of ideological dominance.</p>				
<b>Programme module type:</b>	Optional for all Ancient History Degrees, Ancient History and Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Lewis			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Lewis			

AN4152 Ancient Empires				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri			
<p>This module offers the opportunity for comparative study of the imperial powers of the ancient Mediterranean and Near East. To ensure a manageable workload, it will focus on four case studies, for example the Achaemenid, Seleukid, Roman and Sasanian empires. This will nevertheless be a challenging module, introducing students to much unfamiliar material, and will require wide and disciplined reading. The first half of the module will introduce students to the four imperial systems in turn. The second half will engage in comparative analysis of key aspects of imperial practice, including modes of control, relations with local elites and the extraction of surplus.</p>				
<b>Programme module type:</b>	Optional for all Ancient History Degrees, Ancient History and Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History, Mediaeval History and Archaeology, Scottish History			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60% (1 essay, 2 commentaries)			
<b>Module Co-ordinator:</b>	Dr M Lavan			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Lavan			

Classics - Honours Level - 2014/15 - August 2014

AN4153 Religious Change in Late Antiquity				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu			
The religious landscape of the eastern Mediterranean and the Near East was utterly transformed between the late second century and the early fifth century CE. Rather than approach this through “the rise of Christianity” we will look at the experiences of different groups of polytheists and monotheists, among the latter Jews, Christian and Manichees, in the Roman Empire and beyond it. This was the period in which modern religions emerged. We will ask how and why, and what this did to the world of late antiquity.				
<b>Programme module type:</b>	Optional for Ancient History, Classical Studies			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 10%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof G Woolf			
<b>Lecturer(s)/Tutor(s):</b>	Prof G Woolf			

AN4154 Tyrant - Madman - Fool - Knave: the Julio–Claudian Emperors 14–68 CE (SUBJECT TO APPROVAL)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module explores the reigns of the Julio-Claudian Emperors – Tiberius, Caligula, Claudius and Nero – focusing in particular on their portrayal in Tacitus and Suetonius. Readings are supplemented by selections from other writers such as Dio Cassius and Velleius Paterculus, as well as epigraphic and archaeological evidence. The module explores the personalities and events of the reigns and considers the reliability of their portrayal in the primary sources. As well as the personalities of the emperors the module explores the evolution of the constitutional position of the <i>Princeps</i> and their impact on the wider Roman World.				
<b>Programme module type:</b>	Optional for Ancient History , Classical Studies			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr B Lowe			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Lowe			

AN4425 Networks and Islands: The Archaeology of the Cyclades				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Wed			
Islands are commonly dismissed as isolated from the currents of history, but they often have pivotal roles in social and economic networks that contradict this image of insularity. This module takes an innovative look at the archaeology of islands with a focus on the Cyclades in the Greek Bronze Age, Classical and Roman periods. We will examine issues concerning the fluctuating status of islands, their changing levels of connectivity and isolation, and of course the merits of network analysis as an approach. Through the archaeology and history we will look at major forms of contact such as trade, tourism and exile to islands, and topics such as piracy and evidence from shipwrecks, and we will focus on some key sites such as Akrotiri, Melos and Delos.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, Ancient History, Classical Studies.			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 35%, Practical Examinations = 20%, Coursework = 45%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 35%, Coursework = 65%			
<b>Module Co-ordinator:</b>	Dr R Sweetman			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Sweetman			

## Classical Studies (CL) modules

CL4406 Herodotus				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Fri			
Herodotus was known, even in antiquity, as both the 'father of history' and the 'father of lies', but his reputation has undergone serious re-evaluation in recent years. This module will examine all aspects of Herodotus' work, and its value as historical evidence, while at the same time seeking to locate the Histories in their late fifth-century intellectual context. Topics will include his ideas of causation, use of sources, the representation of foreign lands and peoples, religious beliefs, geographical understanding, and his implicit critique of Athenian imperialism.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Anti-requisite(s):</b>	CL3101, AN4122			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Anderson			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Anderson			

## Classics - Honours Level - 2014/15 - August 2014

CL4433 Religions of the Greeks				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Fri			
<p>This module will examine the range of religious practice and experience in Greece primarily between ca 500 and ca 300 BCE. The civic and political roles of religion will be considered, from local heroes to panhellenic festivals, as will the role of religion in the home and in the life-cycle of the individual. Divination and healing-cults will also be discussed. Attention will be paid throughout to questions of method and interpretation, with regard both to the handling of ancient evidence and to the relative merits and demerits of the competing modern approaches. The overall aim is to attempt to understand a key element of ancient Greek mentality.</p>				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Anderson			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Anderson			

CL4442 Greek Painted Pottery				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Tue			
<p>Greek Painted Pottery offers students the chance to study the ceramic art of Greece, and to examine modern interpretations of this material. The first four seminars provide a survey of the major styles of painted pottery in Greece, primarily in Athens, and their development from Geometric to the late red-figure period (750 - 300 BCE). This includes the history of the scholarship of Greek pottery, and study of the main themes depicted in the iconography. In the second part of the module student apply this basic knowledge to explore the differing modern approaches to pottery (art historical, archaeological, structuralist), and the debates between their practitioners. Case studies of particular themes are used to demonstrate the assumptions that underlie scholars' use of the evidence of pottery, and to suggest ways in which the images and their context can usefully comment on Greek society.</p>				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Lewis			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Lewis			



<b>CL4449 After Virgil: The Aeneid and its Reception</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed			
This module will explore, through close reading and comparative study, what made Virgil the 'Classic of all Europe' in Augustan Rome itself and in the two thousand years following the publication of the Aeneid. Focussing on particular 'hot spots' of Virgilian appropriation - the epics of Dante and Milton, the Early modern drama of Marlow, and selected poetry and prose of the twentieth century - this module will examine not just what makes the Aeneid susceptible to such a remarkable reception-history, but also what the theory and study of 'reception' can offer to a discipline of Classics and our own understanding an criticism of the ancient world.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr E Buckley			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Buckley			

<b>CL4452 Knowledge and the World in Hellenistic Philosophy</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon - 1.00 pm Tue and 12.00 noon - 1.00 pm Thu			
This module will examine theories of knowledge and the natural world in Hellenistic philosophy. Is knowledge of the world possible? If so, how is it attained? What is the world - and what are we - made of, and has it - and have we - been made by intelligent design? Does the correct account of the world undermine the belief in human responsibility? The module will include the following topics: skepticism; perception; scientific method; cosmology; God; soul; fate, free will and responsibility.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, all Classical Studies or Classics Degrees, Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees, Philosophy and Logic and Philosophy of Science Degrees.			
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars/lectures.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Long			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Long			

## Classics - Honours Level - 2014/15 - August 2014

CL4455 Roman Praise			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu		
<p>This module considers Roman praise-giving in a variety of contexts - educational, familial, legal, social, religious, political - over a large timescale (from the late Republic to the fifth century). The module is designed both to plot changes in Roman praise-culture over time and to identify the key functions of praise in Roman society, from infancy to death. A regular comparandum will be Greek praise, via/against which Roman praise contributed to a sense of Roman cultural identity. Many primary texts in translation, in verse and prose and across several genres, will be read.</p>			
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees		
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> Coursework = 50% (2 source criticisms, 20%; 1 essay, 30%), 3-hour Written Examination = 50%		
<b>Module Co-ordinator:</b>	Dr R Rees		
<b>Lecturer(s)/Tutor(s):</b>	Dr R Rees		

CL4990 Special Topic in Classical Studies			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Available only to students also taking ID4002.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module is designed to complement ID4002 'Communication and Teaching in Arts &amp; Humanities', a placement module in which students gain substantial experience of a working educational environment, and of communicating aspects of the Greek and Roman world to school pupils. This module provides the opportunity for students to carry out an extended piece of work on a topic related to their work in ID4002. For example, the topic could have a pedagogical focus, exploring the place of Classics in education, or it could be a more detailed exploration of a subject related to the student's special topic in ID4002.</p>			
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees		
<b>Pre-requisite(s):</b>	Permission of the Classics Honours Adviser.		
<b>Co-requisite(s):</b>	ID4002	<b>Anti-requisite(s):</b>	CL4999, GK4998, GK4999, LT4999.
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours (in total) of supervisory meetings.		
	<b>Scheduled learning:</b> 2 hours	<b>Guided independent study:</b> 148 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr R T Anderson		
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required		

CL4996 Dissertation (Non-Graduating) (60)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Either, or whole year
<b>Planned timetable:</b>	To be arranged.			
This module is for incoming Exchange and non-graduating students who spend all or part of their time in St Andrews working on dissertations which they will submit in their home university. Such students will receive supervision during their time in St Andrews and may be required to submit samples of written work for informal assessment, but there is no formal assessment in St Andrews. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a> )				
<b>Programme module type:</b>	Optional for Ancient History and Classical Studies Visiting Programmes			
<b>Anti-requisite(s):</b>	CL4997			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 6 hours of supervisory meetings.			
	<b>Scheduled learning:</b> 6 hours		<b>Guided independent study:</b> 594 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Assessment is via home institution.			
<b>Module Co-ordinator:</b>	Dr J Coulston			
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required			

CL4997 Dissertation (Non-Graduating) (30)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Planned timetable:</b>	To be arranged.			
This module is for incoming Exchange and non-graduating students who spend all or part of their time in St Andrews working on dissertations which they will submit in their home university. Such students will receive supervision during their time in St Andrews and may be required to submit samples of written work for informal assessment, but there is no formal assessment in St Andrews. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a> )				
<b>Programme module type:</b>	Optional for Ancient History and Classical Studies Visiting Programmes			
<b>Anti-requisite(s):</b>	CL4996			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 3 hours of supervisory meetings			
	<b>Scheduled learning:</b> 3 hours		<b>Guided independent study:</b> 297 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Assessment is via home institution.			
<b>Module Co-ordinator:</b>	Dr J Coulston			
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required			

## Classics - Honours Level - 2014/15 - August 2014

CL4998 Dissertation (Long) In Classical Studies				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Either, or whole year
<b>Availability restrictions:</b>	This module is available only as part of an approved exchange programme.			
<b>Planned timetable:</b>	To be arranged.			
This module is available only to students who take it while studying at another university on an approved exchange programme. It provides the opportunity for students to carry out a sustained piece of work on a topic essentially of their own choice, with supervision by a member of staff. The dissertation may relate to any aspect of the classical world, but the topic must be approved by the Dissertations Co-ordinator. The dissertation will either be completed within one semester or spread over two semesters. The maximum length is 20,000 words (see module booklet for details).				
<b>Programme module type:</b>	Optional for Ancient History and Classical Studies Degrees			
<b>Anti-requisite(s):</b>	CL4999, CL4997, CL4996, LT4999, GK4999, GK4998			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 hours of supervisory meetings			
	<b>Scheduled learning:</b> 6 hours		<b>Guided independent study:</b> 594 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework (dissertation) = 100%			
<b>Module Co-ordinator:</b>	Dr J Coulston			
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required			

CL4999 Dissertation (Short) in Ancient History, Ancient History and Archaeology, or Classical Studies				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
This module provides the opportunity for students to carry out a sustained piece of work on a topic essentially of their own choice, with supervision by a member of staff. The dissertation may relate to any aspect of the classical world, including ancient history, and/or ancient archaeology, but the topic must be approved by the Dissertations Co-ordinator. The dissertation will be completed within one semester, and the maximum length is 10,000 words (see module booklet for details).				
<b>Programme module type:</b>	Compulsory for Ancient History, Classical Studies Single Honours Degrees Optional for Ancient History, Classical Studies Joint Degrees HI4997, HI4998, CL4999 or with permission HI4999 is compulsory for History			
<b>Anti-requisite(s):</b>	CL4998, CL4997, CL4996, CL4990, LT4999, GK4999, GK4998			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 hours (in total) of supervisory meetings			
	<b>Scheduled learning:</b> 3 hours		<b>Guided independent study:</b> 297 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework (Dissertation) = 100%			
<b>Module Co-ordinator:</b>	Dr J Coulston			
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required			

## Greek (GK) modules

<b>GK3021 Greek for Honours Classics 1: Special Option</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am - 11.00 am 4 days a week (Tue - Fri)			
This module is for students who, having taken Latin in both of their first two years, but only begun Greek in their second year with GK1001 and GK1002, are entering Honours Classics or joint Honours Greek in their third year. It consists of 4000-level analysis and essay work together with consolidation of the student's prior knowledge of the Greek language, practice in translation skills, and training in techniques of literary analysis. The module will concentrate on the study of selected genres of Greek poetry and prose and aims to foster an awareness of the interrelationships between later and earlier periods of Greek literature, such as Homeric epic and the Greek literature of the Roman empire. For details of each year's prescribed texts, consult the module booklet and/or the School of Classics Honours booklet.				
<b>Programme module type:</b>	Compulsory for Single Honours Classics or Joint Honours Greek Degree students who passed GK1002 in their second year.			
<b>Pre-requisite(s):</b>	Pass at grade 11 or better in GK1002 and in LT2004	<b>Anti-requisite(s):</b>	GK2003	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 or 4 classes.			
	<b>Scheduled learning:</b> 41 hours		<b>Guided independent study:</b> 259 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60% (essay, 20%, 4 class tests, 40%)			
<b>Module Co-ordinator:</b>	Dr J Hesk			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

<b>GK3022 Greek for Honours Classics 2: Special Option</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am - 11.00 am 3 days a week (Tue - Fri)			
This module is for students who, having taken Latin in both of their first two years, but only begun Greek in their second year with GK1001 and GK1002, are entering Honours Classics or joint Honours Greek in their third year. It consists of 4000-level analysis and essay work together with consolidation of the student's prior knowledge of the Greek language, practice in translation skills, and training in techniques of literary analysis. The module will concentrate on the study of selected genres of Greek poetry and prose and aims to foster an awareness of the ways in which different genres and authors can share and manipulate language, strategy and themes. For details of each year's prescribed texts, consult the module booklet and/or the School of Classics Honours booklet.				
<b>Programme module type:</b>	Compulsory for Single Honours Classics or Joint Honours Greek Degree students who passed GK1002 in their second year.			
<b>Pre-requisite(s):</b>	GK3021	<b>Anti-requisite(s):</b>	GK2004	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 or 4 classes.			
	<b>Scheduled learning:</b> 36 hours		<b>Guided independent study:</b> 264 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60% (essay, 20%, 4 class tests, 40%)			
<b>Module Co-ordinator:</b>	Dr N Wiater			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

## Classics - Honours Level - 2014/15 - August 2014

GK4105 Greek Rhetoric and Its Representation				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 3.00 pm Tue and 2.00 pm - 3.00 pm Thu			
This module gives students the opportunity to translate and perform detailed critical analysis of Greek prose texts of the classical period which are concerned with the nature, development and representation of rhetoric and sophistry. It also requires students to address broader questions concerning Athenian culture's social, moral and political response to the development of an 'art' of persuasion.				
<b>Programme module type:</b>	Optional for all Classics and Greek Degrees and Latin (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of GK2001, GK2002, GK2003, GK2004, including at least 1 grade 11 or above, OR GK3021 and GK3022			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 seminar and 1 tutorial/lecture.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA: (APPROVAL FOR CHANGE PENDING)</b> Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	<b>As used by St Andrews: (APPROVAL FOR CHANGE PENDING)</b> 2-hour Written Examination = 40%, Unseen test = 15%, Coursework = 45%			
<b>Module Co-ordinator:</b>	Dr J Hesk			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Hesk			

GK4113 Greeks and Barbarians				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon - 1.00 pm Tue and 12.00 noon - 1.00 pm Thu			
Exploring Greek identity through representation of non-Greeks was a prominent feature of Greek literature and culture across many centuries. This module examines that theme in a range of authors and periods. It looks first at archaic epic, especially Homer's <i>Odyssey</i> . The central part of the course then focuses on classical Athens, especially Euripides and Aristophanes, as well as a selection of extracts from prose texts (Herodotus is an important reference point, but will not be studied at length as a set text, having been covered at GK 1000-level). The final part of the course then looks ahead, more briefly, to the Hellenistic and Roman worlds, with extracts from the description of India in Philostratus' <i>Life of Apollonius of Tyana</i> .				
<b>Programme module type:</b>	Optional for all Classics and Greek Degrees and Latin (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of GK2001, GK2002, GK2003, GK2004, including at least 1 grade 11 or above, OR GK3021 and GK3022			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA: (APPROVAL FOR CHANGE PENDING)</b> Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	<b>As used by St Andrews: (APPROVAL FOR CHANGE PENDING)</b> 2-hour Written Examination = 40%, Unseen test = 15%, Coursework = 45%			
<b>Module Co-ordinator:</b>	Prof J König			
<b>Lecturer(s)/Tutor(s):</b>	Prof J König			

GK4121 Violence in Early Greek Poetry				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon - 1.00 pm Tue and 12.00 noon - 1.00 pm Thu			
<p>This module explores the role of violence in early Greek culture. The primary focus will be on literature, and we will study closely relevant passages from a broad range of texts in the original Greek (Homer, Hesiod, Simonides, Pindar/ Bacchylides, Solon and others). But we will also attempt to put the literature into a broader context by looking at some significant pieces of art (vase painting, sculpture, etc.). The aim of the module is to achieve a better understanding of ways of depicting violence in early Greek literature and art (the "language" of violence, if you like), how ancient attitudes to violence differ from modern ones, and what the function of violence is within the context of the artefacts we will examine.</p>				
<b>Programme module type:</b>	Optional for all Classics and Greek Degrees and Latin (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of GK2001, GK2002, GK2003, GK2004, including at least 1 grade 11 or above, OR GK3021 and GK3022			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr N Wiater			
<b>Lecturer(s)/Tutor(s):</b>	Dr N Wiater			

GK4998 Dissertation in Greek (Long)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Either, or whole year
<b>Availability restrictions:</b>	Available only to students in the final year of the Single Honours Greek programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides the opportunity for students in Single Honours Greek to carry out a sustained piece of work on a topic essentially of their own choice, with supervision by a member of staff. The dissertation may relate to any aspect of Greek life or literature, provided that the study of Greek texts is involved. The topic must be approved by the Dissertations Co-ordinator. The dissertation will be completed over one or two semesters, and the maximum length is 20,000 words (see module booklet for details).</p>				
<b>Programme module type:</b>	Optional for Single Honours Greek Degrees			
<b>Pre-requisite(s):</b>	(GK2001 with GK2002) or (GK2003 with GK2004) - with a pass at grade 11 or better in at least one of these.			
<b>Anti-requisite(s):</b>	CL4999, CL4998, CL4997, CL4996, LT4999, GK4999, CL4990			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 hours of supervisory meetings			
	<b>Scheduled learning:</b> 6 hours		<b>Guided independent study:</b> 594 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework (Dissertation) = 100%			
<b>Module Co-ordinator:</b>	Dr J Coulston			
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required			

**Classics - Honours Level - 2014/15 - August 2014**

<b>GK4999 Dissertation in Greek</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1 or 2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	To be arranged.		
This module provides the opportunity for students to carry out a sustained piece of work on a topic essentially of their own choice, with supervision by a member of staff. The dissertation may relate to any aspect of Greek life or literature, provided that the study of Greek texts is involved. The topic must be approved by the Dissertations Co-ordinator. The dissertation will be completed within one semester, and the maximum length is 10,000 words (see module booklet for details).			
<b>Programme module type:</b>	Optional for all Classics and Greek (except Single Honours) Degrees		
<b>Pre-requisite(s):</b>	2 of GK2001, GK2002, GK2003, GK2004, including at least 1 grade 11 or above, OR GK3021 and GK3022		
<b>Anti-requisite(s):</b>	CL4999, CL4998, CL4997, CL4996, GK4998, LT4999, CL4990		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 hours of supervisory meetings		
	<b>Scheduled learning:</b> 3 hours	<b>Guided independent study:</b> 297 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework (Dissertation) = 100%		
<b>Module Co-ordinator:</b>	Dr J Coulston		
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required		



## Latin (LT) modules

LT3017 Latin for Honours Classics 1				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 3.00 pm Tue - Fri			
This module is for students who, having taken Greek in both of their first two years, but only begun Latin in their second year with LT1001 and LT1002, are entering Honours Classics or joint Honours Latin in their third year. It consists of the whole of the 20-credit LT2003 module, with some additional set text reading in Latin and an additional piece of Honours-level assessment. The module is assessed by one Honours-level essay (30%), one literary criticism (20%) two class tests (10%) and an end-of-semester exam (40%).				
<b>Programme module type:</b>	Compulsory for Single Honours Classics or Joint Honours Latin Degree students who passed LT1002 in their second year.			
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in LT1002 and in GK2004.			
<b>Anti-requisite(s):</b>	LT2003	<b>Required for:</b>	LT3018, LT4203	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 4 meetings per week plus attendance at selected 4000-level LT seminars.			
	<b>Scheduled learning:</b> 47 hours		<b>Guided independent study:</b> 253 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework (1 essay, 30%; 1 literary criticism, 20%; 2 class tests, 10%) = 60%			
<b>Module Co-ordinator:</b>	Dr R Rees			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

LT3018 Latin for Honours Classics 2				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 3.00 pm Tue - Fri			
This module is for students who, having taken Greek in both of their first two years, but only begun Latin in their second year with LT1001 and LT1002, are entering Honours Classics or joint Honours Latin in their third year. It consists of the whole of the 20-credit LT2004 module, with some additional set text reading in Latin and an additional piece of Honours-level assessment.				
<b>Programme module type:</b>	Compulsory for Single Honours Classics or Joint Honours Latin Degree students who passed LT1002 in their second year.			
<b>Pre-requisite(s):</b>	LT3017	<b>Anti-requisite(s):</b>	LT2004	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 - 4 meetings per week plus attendance at selected 4000-level LT seminars.			
	<b>Scheduled learning:</b> 47 hours		<b>Guided independent study:</b> 253 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%; Coursework = 60% (1 essay, 30%; 1 literary criticism, 20%; 1 class test, 10%)			
<b>Module Co-ordinator:</b>	Dr E R G Gee			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

## Classics - Honours Level - 2014/15 - August 2014

LT4201 Roman Epic				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed			
Selected portions from three Latin epics are studied in this module. Topics covered will include the influence of Greek epic upon the Latin writers, and the development of epic in the century after Virgil. Close attention will be paid to each poet's handling of themes and narrative structure, to his exploitation of the tradition, and to his style.				
<b>Programme module type:</b>	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	<b>As used by St Andrews:</b> Coursework = 60% (2 commentaries, 30%; essay, 15%, class test, 15%), 2-hour Written Examination = 40%			
<b>Module Co-ordinator:</b>	Dr E Buckley			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Buckley, Dr E R G Gee			

LT4203 Latin Prose Composition				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon - 1.00 pm Tue and 9.00 am - 10.00 am Fri			
This module will deal with the different ways in which students may make use of their knowledge of Latin in order to produce both translations from English texts into grammatically correct Latin and also free compositions directly in Latin. This will involve a more active process of language learning than is required for translation from Latin into English, though it will also have benefits for the reading of original texts. The content of the module will deal with all aspects of the Latin language that need special study for effective translation into Latin: particles, participles, the treatment of abstract nouns, equivalence between English and Latin idioms, etc.				
<b>Programme module type:</b>	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 meetings.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> Coursework = 60% (2 class tests, 30% each), 2-hour Written Examination = 40%			
<b>Module Co-ordinator:</b>	Dr J Coderch			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Coderch			

LT4214 Latin Philosophical Writing				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu			
This module will explore a tradition of philosophy which has often been considered 'secondary' or 'derivative', namely the writing of philosophical works in Latin. This module aims to evaluate Latin philosophical writing in its own right. Taken as a whole, the Latin philosophical corpus present an impressive record of cultural assimilation and innovation. We shall see how, from the Late Republic onwards, Roman philosophy engages with debates current in the Hellenistic philosophical schools, Romanising them in the process, and placing them in the context of world order under the Roman empire.				
<b>Programme module type:</b>	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours per week.			
	<b>Scheduled learning:</b> hours		<b>Guided independent study:</b> hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = %, Practical Examinations = %, Coursework = %			
	<b>As used by St Andrews:</b> 2-hour Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr E R G Gee			
<b>Lecturer(s)/Tutor(s):</b>	Dr E R G Gee			

LT4216 The Art of Translation: Ovid in English				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Tue			
This module offers the opportunity to study, in Latin and English, the theorisation of the activity of translation. The module will explore both ancient and modern theories of translation, invention and originality; examine how and for what purposes classical culture is perceived and transmitted by translation; and test these approaches through the study of a range of influential published translations from two key Ovidian texts, the Amores and Metamorphoses, from two distinct periods: the Renaissance and twentieth century. Alongside analysis of the translations of others, students will develop their own portfolio of creative translations from the prescription, developing their own linguistic and literary critical skills in the process.				
<b>Programme module type:</b>	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	<b>As used by St Andrews:</b> Coursework = 60% (2 commentaries, 30%; essay, 15%; class test, 15%), 2-hour Written Examination = 40%			
<b>Module Co-ordinator:</b>	Dr E Buckley			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Buckley			

## Classics - Honours Level - 2014/15 - August 2014

LT4217 Latin Oratory				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Tue			
Oratory - or 'public-speaking' - was a fundamental medium throughout classical antiquity, in Greek and Roman cultures alike. It dominated mainstream education and was a sine qua non in politics and law, those principle arenas of the aristocracy. But despite being a constant, oratory was far from stable and was frequently theorised, defined, defended and developed. This module looks at some key texts in the history of Latin oratory across times of immense change – the late Republic through to the High Empire.				
<b>Programme module type:</b>	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees			
<b>Pre-requisite(s):</b>	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 45%, Practical Examinations = 0%, Coursework = 55%			
	<b>As used by St Andrews:</b> Coursework = 60% (2 source criticisms, 30%; essay, 15%; class test, 15%); 2-hour Written Examination = 40%			
<b>Module Co-ordinator:</b>	Dr R Rees			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Rees, Dr N Wiater			

LT4999 Latin Dissertation				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in second year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
This module provides the opportunity for students to carry out a sustained piece of work on a topic essentially of their own choice, with supervision by a member of staff. The dissertation may relate to any aspect of Roman life or literature, provided that the study of Latin texts is involved. The topic must be approved by the Dissertations Co-ordinator. The dissertation will be completed within one semester, and the maximum length is 10,000 words (see module booklet for details).				
<b>Programme module type:</b>	Optional for all Classics and Latin Degrees			
<b>Pre-requisite(s):</b>	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018			
<b>Anti-requisite(s):</b>	CL4999, CL4998, CL4997, CL4996, GK4999, 20, CL4990			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 hours of supervisory meetings			
	<b>Scheduled learning:</b> 3 hours		<b>Guided independent study:</b> 297 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework (Dissertation) = 100%			
<b>Module Co-ordinator:</b>	Dr J Coulston			
<b>Lecturer(s)/Tutor(s):</b>	Individual supervisors assigned as required			

## School of Computer Science

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Computer Science (CS) modules

CS3051 Software Engineering				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module gives a broad overview of software engineering, presenting the fundamental aspects as a collaborative professional activity including its concerns and approaches. Students learn to apply a number of different software engineering methods and practices, and to match their choice of method to the problem at hand and the context in which a project is undertaken. The module provides the background and practical experience for students to enter professional careers where they will be working on large-scale software projects in teams.</p>				
<b>Programme module type:</b>	Compulsory for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees with subjects other than Psychology with BPS Recognition, Computer Science MSci Optional for Computer Science and Psychology with BPS Recognition BSc			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

## Computer Science - Honours Level - 2014/15 - August 2014

CS3052 Computational Complexity				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module builds upon finite state machines, context-free grammars and big-O notation from 2nd year. Turing machines, non-determinism and pushdown automata are introduced, followed by studies on decidability, simulation and the Halting problem. The complexity classes P, NP, co-NP, NP-hard, etc., are described via analysis of SAT and graph isomorphism. Strengths and limitations of the abstract approach to complexity are discussed, followed by an in-depth introduction to practical complexity: flops, worst- and average-case analysis, approximate solutions, and case studies.</p>				
<b>Programme module type:</b>	Compulsory for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees with subjects other than Psychology with BPS Recognition, Computer Science MSci Optional for Computer Science and Psychology with BPS Recognition BSc			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Anti-requisite(s):</b>	CS3103 and CS3201	
<b>Required for:</b>	CS4052, CS4204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS3098 Minor Software Team Project				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Not available to General Degree Students.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module allows students to take part in a substantial software engineering project as part of a team, using professional development techniques. Each team specifies, plans, designs, implements and documents a medium-sized software system, under the guidance of a member of staff. Cooperation within and between teams is essential in order to produce successful solutions. This module has a similar structure to CS3099, but with reduced scope appropriate for Joint Honours students.</p>				
<b>Programme module type:</b>	Compulsory for Computer Science Joint Honours Degrees.			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Anti-requisite(s):</b>	CS3099	
<b>Required for:</b>	CS4098			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, supervisor meetings and demonstrations arranged as necessary			
	<b>Scheduled learning:</b> 69 hours		<b>Guided independent study:</b> 81 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS3099 Major Software Team Project				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Not available to General Degree Students			
<b>Planned timetable:</b>	To be arranged.			
This module allows students to take part in a substantial software engineering project as part of a team, using professional development techniques. Each team specifies, plans, designs, implements and documents a medium-sized software system, under the guidance of a member of staff. Cooperation within and between teams is essential in order to produce successful solutions.				
<b>Programme module type:</b>	Compulsory for Computer Science BSc, Internet Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Anti-requisite(s):</b>	CS3098	
<b>Required for:</b>	CS4099			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, supervisor meetings and demonstrations arranged as necessary.			
	<b>Scheduled learning:</b> 69 hours		<b>Guided independent study:</b> 231 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS3101 Databases				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module introduces data models and modeling techniques, relational design and normalisation. It also examines a range of issues in database implementation, including indexing, query processing, transactions and recovery.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%,			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

## Computer Science - Honours Level - 2014/15 - August 2014

CS3102 Data Communications and Networks				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module introduces the basics of data communications and computer networks, and examines network protocols and architectures.				
<b>Programme module type:</b>	Compulsory for Internet Computer Science BSc Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101), CS2002 and CS2003	<b>Required for:</b>	CS4103, CS4302	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS3104 Operating Systems				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module examines the changing role of the operating system, the concept and implementation of process, the OS/hardware interface with regard to storage and protection, and the techniques developed to achieve safety and throughput in multitasking systems.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Required for:</b>	CS4202, CS4204	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			



CS3105 Artificial Intelligence				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module examines the general features of the A.I. problem solving process, and in particular the various forms of heuristic, together with their implementation and case studies of real systems.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS3106 Human Computer Interaction				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module covers the main aspects of Human Computer Interaction. Design guidelines, structured design methods and standards are studied, and practice is given in implementation and evaluation. Students gain experience of current interactive audio, visual and manipulative technologies.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

## Computer Science - Honours Level - 2014/15 - August 2014

CS3301 Component Technology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module provides students with understanding of current and emerging component technologies, focusing on the major themes of object-oriented and message-oriented middleware. The first theme examines the evolution of object-oriented programming into component models such as CORBA, COM, RMI and Java Beans. The second theme explores the emerging field of message-oriented middleware and of service-oriented computing models such as SOAP and REST.				
<b>Programme module type:</b>	Compulsory for Internet Computer Science BSc Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101), CS2002 and CS2003			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS3302 Data Encoding				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module explains the techniques used to encode data, emphasising the ideas of security and secrecy, error correcting capabilities, and data compression.				
<b>Programme module type:</b>	Compulsory for Internet Computer Science BSc Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4052 Logic and Software Verification				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Building on earlier coverage of elementary logic, this module motivates the need for formal methods and software verification approaches as model checking for guaranteeing the correctness of software systems. The module covers modelling, system property specification using temporal logics, and more applied approaches to software specification and verification through the use of model checkers. Model checkers such as SPIN and UPPAAL are used both in lectures and in practical work. Petri nets and program semantics are also explored. Software correctness is thus presented as a matter not of testing but of pre-execution verification through model checking.</p>				
<b>Programme module type:</b>	Compulsory for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees with subjects other than Psychology with BPS Recognition, Computer Science MSci Optional for Computer Science and Psychology with BPS Recognition BSc			
<b>Pre-requisite(s):</b>	CS3052			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4098 Minor Software Project				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
<p>This module has the same content as CS4099, but with reduced scope appropriate for Joint Honours students.</p>				
<b>Programme module type:</b>	Compulsory for Joint Computer Science degrees.			
<b>Pre-requisite(s):</b>	CS3098	<b>Anti-requisite(s):</b>	CS4099	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision			
	<b>Scheduled learning:</b> 69 hours		<b>Guided independent study:</b> 81 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

## Computer Science - Honours Level - 2014/15 - August 2014

CS4099 Major Software Project				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
This module allows students to undertake a substantial software engineering project using professional development techniques. Each student designs, specifies and constructs a medium-sized software system, or undertakes a formal development and proof of such a system, under the guidance of a member of staff. The syllabus is designed on an individual basis.				
<b>Programme module type:</b>	Compulsory for Computer Science BSc, Internet Computer Science BSc, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3099	<b>Anti-requisite(s):</b>	CS4098	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision.			
	<b>Scheduled learning:</b> 69 hours		<b>Guided independent study:</b> 231 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4102 Computer Graphics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module covers the fundamental concepts of computer graphics, and develops the ability to apply the concepts to the generation of realistic, synthetic images of 3D objects and scenes. On completion of the module, students should be competent to undertake many tasks in computer graphics, and should have an understanding of the theory underlying many of the relevant techniques.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4103 Distributed Systems				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module covers the fundamentals of distributed systems, with reference to system models, programming languages, algorithmic techniques, concurrency and correctness.				
<b>Programme module type:</b>	Compulsory for Internet Computer Science BSc Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3102			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4201 Programming Language Design and Implementation				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module studies the design and implementation of programming languages. Topics include language design principles, abstract syntax, evaluation mechanisms, binding, type systems, polymorphism, data encapsulation, exceptions, formal definition of programming languages, compiling techniques, abstract machine design, run-time systems and garbage collection.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

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CS4202 Computer Architecture				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module studies the principles and technology of modern computer architectures, with particular emphasis on performance and acceleration. Topics include the CPU, memory, interconnect architectures, performance concepts and programming models.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3104			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4203 Computer Security				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module introduces the basic concepts of computer security and cryptography, common attacks and defences against them, and relevant legal and policy frameworks.				
<b>Programme module type:</b>	Compulsory for Internet Computer Science BSc Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Anti-requisite(s):</b>	IS5104	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4204 Concurrency and Multi-Core Architectures				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module presents the key concepts of programming multi-core/many-core and other parallel architectures, ranging from the identification and use of parallel patterns; the use of structured parallelism to implement task and data parallelism; key implementation issues, including task identification, granularity, scheduling, threads, garbage collection, task placement, locality; performance monitoring and debugging.</p>				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3052 and CS3104			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4302 Multimedia				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces the concepts of analogue and digital media, and analyses techniques for encoding, manipulating, compressing, and transmitting media based on text, audio, images, and moving images, as well as their connection with human perception. Within the context of networked multimedia, it presents issues and solutions involved in transporting time-sensitive data across computer networks.</p>				
<b>Programme module type:</b>	Compulsory for Internet Computer Science BSc Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3102			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

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CS4303 Video Games				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module builds on the general-purpose programming abilities acquired earlier, introducing games-specific techniques and material. Computer games are now a bigger industry than films, yet they are continuing to develop. While the budget for a new game may rival that of a Hollywood blockbuster, there is also a growing demand for lower octane coffee-break games that can be accessed for short periods in a browser, and for games that can be played on-the-go with a mobile device. Games programming skills are developed through lectures and laboratories, culminating in the creation of actual games.</p>				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS4402 Constraint Programming				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces constraint-based reasoning as a powerful mechanism for knowledge representation and inference. It provides a thorough grounding in the constraint satisfaction/constrained optimisation problem formalism, and covers both basic techniques for implementing constraint solvers and the use of advanced techniques with a commercial solver.</p>				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and fortnightly tutorial.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			



CS4499 Computer Science (Special Subject)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Planned timetable:</b>	To be arranged.			
This module is a guided reading module on any aspect of Computer Science not covered by other available modules, intended only for students in the School of Computer Science for whom exceptional timetable arrangements (such as a semester or year of absence) unduly restrict the availability of modules.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Internet Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	The consent of the Head of School			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour supervision meeting.			
	<b>Scheduled learning:</b> 11 hours		<b>Guided independent study:</b> 139 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk			

CS5010 Artificial Intelligence Principles				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module covers foundational knowledge of Artificial Intelligence (AI). The module gives an overview of AI and its philosophy. It covers fundamental principles in AI reasoning, planning, doing, and learning. It shows how search is used to solve a variety of problems in AI. The fundamentals of symbolic AI, machine learning, neural networks, and robotics are shown, together with their relation to cognitive science. Notions such as agency and uncertainty in AI are covered. Finally, the philosophy of AI in practice and the philosophical problems in AI are shown.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Anti-requisite(s):</b>	CS3105	
<b>Required for:</b>	CS5011			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

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CS5011 Artificial Intelligence Practice				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module covers practical design and implementation of Artificial Intelligence (AI). It provides grounding in AI technique, covering techniques in the areas of AI reasoning, planning, doing, and learning. A basic understanding of an AI programming language is provided. Finally, it is shown how to implement AI ideas in software and how to evaluate such implementation.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3105 (UG programmes only) Students must have passed CS3105 or CS5010, or be currently taking CS5010			
<b>Required for:</b>	CS5012, CS5019			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

CS5012 Language and Computation				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module covers the major aspects of natural language processing and speech understanding, including computational syntax, computational semantics, discourse processing, machine translation and speech recognition.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3052 or CS5010			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

CS5021 Advanced Networks				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module looks forward to new concepts and topics in networking, and also reviews key abstractions including layered models, protocols and Internet architecture, and key concerns such as reliability, resource utilization and quality of service. Specific networking technologies are used to demonstrate monitoring, measurement and analysis of real traffic.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Required for:</b>	CS5023, CS5029	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

CS5023 Mobile and Wireless Networks				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module examines how computing and communication are used to allow mobile systems to function in heterogeneous environments, with variations in available network resources and diverse/intermittent network connectivity. A key outcome of the module is for students to be able to critically assess the capabilities and constraints of mobile systems.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3102 or CS5021			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

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CS5030 Software Engineering Principles				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module examines the key concepts in small and large-scale software development. Project management is explored, along with the processes involved in developing system requirements, functionality and high-level descriptions necessary to guide the development of, and assess, a working system.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Required for:</b>	as co-requisite for CS5031	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

CS5031 Software Engineering Practice				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module introduces advanced software engineering methods supporting the development of complex, composite software systems with an emphasis on software configuration management, reuse and test-driven development practices. It examines software reuse at different levels of scale, from software libraries and components to service-oriented architectures and discusses how reuse presents both challenges and opportunities for the development of quality software. A key process in today's software engineering practice is testing; the module introduces testing methods that complement the different scales of reuse-oriented development, from unit-level testing to integration testing and system-level testing. Students work on a project to design, implement and test a complex, distributed application to put the content of the lectures into practice. Reference is made to the content of the co-requisite Software Engineering Principles module where appropriate, so that students learn how the practices studied fit into a larger software engineering lifecycle.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Required for:</b>	CS5032, CS5033, CS5039	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

CS5032 Critical Systems Engineering				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides students with an understanding of the concepts and development techniques used for critical, socio-technical systems. On completion they will understand the notion of system dependability, the key characteristics of dependable systems, and the specialised software engineering techniques that may be used to ensure dependable system operation. Students also gain practical experience of applying some of these techniques in systems specification, design or implementation.</p>				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3051 or CS5031			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			
CS5033 Software Architecture				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces students to the concept of software architecture, as an aid to software design, reuse and evolution. When students have completed this module, they will: have knowledge of the key elements of software architectures; recognise architectural styles of existing software systems; be able to describe the software architecture of a non-trivial system accurately; be able to construct systems that satisfy an architectural description; understand how software architecture aids design, reuse and evolution of software.</p>				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS3051 or CS5031			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

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CS5040 Human Computer Interaction Principles				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module provides a broad introduction to the study of interaction between humans and computational machines. Material includes: the history of interfaces and interaction; ubiquitous computing; human vision, perception, memory and hearing; paradigms of interaction; universal design and design rules; new HCI paradigms beyond the desktop; socio-organisational issues in HCI.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Anti-requisite(s):</b>	CS3106	
<b>Required for:</b>	CS5042, CS5043			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, practical classes and tutorials.			
	<b>Scheduled learning:</b> 41 hours		<b>Guided independent study:</b> 109 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

CS5041 Human Computer Interaction Practice				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Availability restrictions:</b>	The module is available to all students enrolled on the MSc Human Computer Interaction Programme. A quota for other students may be necessary due to lab equipment constraints, in which case preference will be given to other MSc students.			
<b>Planned timetable:</b>	To be arranged.			
This module develops prototype-building skills for a wide range of interactive technologies. Students learn how to create interactive hardware and software using technologies such as tangible programming kits, mobile devices, microprocessor kits and depth cameras. There is a strong emphasis on practical assignments.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	(CS2001 or CS2101) and CS2002	<b>Required for:</b>	CS5042, CS5043	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, practical classes and tutorials.			
	<b>Scheduled learning:</b> 66 hours		<b>Guided independent study:</b> 84 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

CS5042 User-Centred Interaction Design				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Availability restrictions:</b>	The module is available to all students enrolled on the MSc Human Computer Interaction Programme. A quota for other students may be necessary due to lab equipment constraints, in which case preference will be given to other MSc students.			
<b>Planned timetable:</b>	To be arranged.			
This module studies methodologies in interaction design that are at the core of current practice for user interface engineering and application development. Students work towards creating designs of interactive systems that are based on human, group and organisation needs rather than on technical constraints. The module does not involve a great deal of programming.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS5040 or CS3106	<b>Co-requisite(s):</b>	CS5041	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures, 3 practicals and 1 tutorial.			
	<b>Scheduled learning:</b> 66 hours		<b>Guided independent study:</b> 84 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%			
	<b>As used by St Andrews:</b> Coursework = 85%, Presentation = 15%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			
CS5043 Research Methods for User Experience				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module provides an introduction to quantitative and qualitative methods for evaluating interactive systems and digital artefacts. It covers experimental design, hypothesis testing and field studies. Skills in applying evaluation methods are reinforced through practical assignments.				
<b>Programme module type:</b>	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
<b>Pre-requisite(s):</b>	CS5040 or CS3106			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, practical classes and tutorials.			
	<b>Scheduled learning:</b> 41 hours		<b>Guided independent study:</b> 109 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

Computer Science - Honours Level - 2014/15 - August 2014

CS5199 Individual Masters Project			
<b>SCOTCAT Credits:</b>	60	SCQF Level 11	<b>Semester:</b> 1
<b>Planned timetable:</b>	Full-time for one semester.		
This module allows students to undertake a major software engineering or research project, under the guidance of an individual supervisor. The project builds on experience gained in CS4099, although the topic must differ significantly from the 4000-level project.			
<b>Programme module type:</b>	Compulsory for MSci Honours Computer Science		
<b>Pre-requisite(s):</b>	CS4099, Entry to MSci Honours Computer Science		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision.		
	<b>Scheduled learning:</b> 45 hours	<b>Guided independent study:</b> 555 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	hons-coord-cs@st-andrews.ac.uk		
<b>Lecturer(s)/Tutor(s):</b>			



## School of Divinity

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Divinity (DI) modules

DI3701 Reading in Patristic Theology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 1 - 5 essay submitted week 6)			
This module involves close study of key texts of Patristic theology, setting these in the context of historical developments and conflicts and noting the development of key theological themes and language. Texts will be studied chronologically, with readings drawn from the writings of figures such as Justin Martyr, Irenaeus, Tertullian, Origen, Athanasius, the Cappadocian Fathers, Augustine, and the early Ecumenical Councils. Students will be expected to read broadly in the primary texts, with specific readings assigned for closer attention.				
<b>Programme module type:</b>	Compulsory for MTheol, BD, and Theological Studies			
<b>Pre-requisite(s):</b>	DI2000 or DI2006			
<b>Co-requisite(s):</b>	DI3702	<b>Required for:</b>	DI4935	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Westerholm			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Westerholm			

DI3702 Reading in Mediaeval Theology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 7 - 11; essay submitted week 12)			
This module involves close study of key texts of Mediaeval theology, setting these in the context of historical developments and conflicts and noting the development of key theological themes and language. Texts will be studied chronologically, with readings drawn from the writings of figures such as Anselm, Abelard, Lombard and Aquinas.				
<b>Programme module type:</b>	Compulsory for MTheol, BD, and Theological Studies			
<b>Pre-requisite(s):</b>	DI2006	<b>Co-requisite(s):</b>	DI3701	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr W Hyland			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Hyland			

## Divinity - Honours Level - 2014/15 – August 2014

DI3703 Reading in Reformation and Early Modern Theology			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 1 - 5 essay submitted in week 6)		
This module involves close study of key texts of Reformation and counter-Reformation theology, setting these in the context of historical developments and noting the development of key theological themes and language. Texts will be studied chronologically, with attention paid to their contexts in the ecclesiastical developments and conflicts of the early modern period, as well as to their formative influence on the modern world. Students will be expected to read broadly in the primary texts, with specific readings assigned for closer attention.			
<b>Programme module type:</b>	Either DI3703 or DI3704 is compulsory for MTheol, BD, and Single Honours Theological Studies. Optional for Joint Honours Theological Studies		
<b>Pre-requisite(s):</b>	DI2000		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).		
	<b>Scheduled learning:</b> 15 hours	<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr M Westerholm		
<b>Lecturer(s)/Tutor(s):</b>	Dr M Westerholm		

DI3704 Reading in Theological Ethics			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 7 - 11 essay submitted in week 12)		
This module involves close study of key thinkers in the history of theological ethics, focusing on a key thinker from each of five different historical periods: Bible & early church, patristic, medieval, early modern, and twentieth century. Our goal is to understand how these thinkers relate to one another, how theological ethics relates to other aspects of theology like the study of doctrine and Scripture, and how they continue to influence thinking even today—often without our noticing their influence! The module will also provide helpful background for those students who plan to take 4000-level modules in theological ethics.			
<b>Programme module type:</b>	Either DI3703 or DI3704 is compulsory for MTheol, BD, and Single Honours Theological Studies Optional for Joint Honours Theological Studies		
<b>Pre-requisite(s):</b>	DI2000		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).		
	<b>Scheduled learning:</b> 15 hours	<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr J Perry		
<b>Lecturer(s)/Tutor(s):</b>	Dr J Perry		

DI3711 Reading in the Old Testament / Hebrew Bible				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 1 - 5 essay submitted Week 6)			
<p>Reading the Old Testament/Hebrew Bible is an integrative discipline that brings together close reading, linguistic skill, historical sensitivity, literary perception, compositional technique, and theological analysis. This module is designed to develop the technical and analytical skills needed to read the OT/HB in its original historical, literary, and theological contexts. The student will be introduced to the sub-disciplines of textual criticism, semantics/lexicography, scribal composition, and literary analysis (of prose and poetry). As an exercise in applied hermeneutics, the approach throughout is practical, in which the student will be learning methods by practicing them. The purpose of the module is to prepare the students to endeavour their own close readings of the OT/HB throughout their honours programme.</p>				
<b>Programme module type:</b>	Compulsory for Biblical Studies, MTheol, BD, Hebrew, New Testament and Theological Studies			
<b>Pre-requisite(s):</b>	DI2001	<b>Co-requisite(s):</b>	DI3712	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Nevader			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Nevader			

DI3712 Reading in the New Testament				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 7 - 11 essay submitted Week 12)			
<p>Reading the New Testament is an integrative discipline that brings together textual evaluation, historical perspective, literary sensitivity, and theological analysis. Building on the work done in Reading the Old Testament, this module is designed to develop further the analytical skills needed to read the NT in its original historical, literary, and theological contexts. To that end, the student will be introduced to the sub-disciplines of textual criticism, lexicography, translation theory, tradition-history, discourse analysis, and synoptic criticism. As an exercise in applied hermeneutics, the approach throughout is practical, in which the student will be learning the various methods by practicing them. The purpose of the module is to prepare the students to begin their own reading of the New Testament throughout their Honours programme.</p>				
<b>Programme module type:</b>	Compulsory for Biblical Studies, MTheol, BD, Hebrew, New Testament and Theological Studies			
<b>Pre-requisite(s):</b>	DI2003	<b>Co-requisite(s):</b>	DI3711	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D Moffitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Moffitt			

## Divinity - Honours Level - 2014/15 – August 2014

DI3713 Reading in Second Temple Contexts				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 1 - 5, writing up coursework in Week 6)			
This module will examine the methodological principles and concerns related to the use of Second Temple texts as background or context to the study of the Bible, including the difficult question of identifying the provenance of given Pseudepigrapha and the potential value of specific texts to the reconstruction of Biblical contexts. The issues will be explored through close examination of specific texts, such as the Dead Sea Scrolls and the Old Testament Pseudepigrapha.				
<b>Programme module type:</b>	Compulsory for Single Honours Biblical Studies, MTheol, BD, and Theological Studies Optional for Joint Honours Biblical Studies, Hebrew, New Testament			
<b>Pre-requisite(s):</b>	11 or better in DI2001	<b>Co-requisite(s):</b>	DI3714 or DI3715	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof J Davila			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Davila			

DI3714 Reading the Bible Theologically				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 7 - 11)			
This module will introduce students to the practices of canonical criticism, theological interpretation and effective history, allowing students to bring together the theological and biblical components of their studies and to develop critical awareness of the strengths and weaknesses of the different theological hermeneutics. These methods will be explored through the close study of biblical texts, read according to such methodologies, with the findings contrasted with the typical results of historical criticism. This will enable students to practice such methods themselves, laying an important foundation for subsequent study.				
<b>Programme module type:</b>	Either DI3714 or DI3715 is compulsory for Single Honours Biblical Studies, MTheol, BD, and Theological Studies Optional for Joint Honours Biblical Studies, Hebrew, New Testament			
<b>Pre-requisite(s):</b>	Either DI2001 or DI2003	<b>Anti-requisite(s):</b>	DI3715	
<b>Co-requisite(s):</b>	DI3713			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr D Moffitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Moffitt			

DI3715 Reading the Bible in Late Modernity				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged. (Classes held in Weeks 7 - 11)			
<p>This module will introduce students to the distinctive kinds of biblical readings that have arisen in Late Modernity. Students will engage with the Social Scientific interpretation of the Bible and the way in which this connects with and facilitates the various "hermeneutics of suspicion" with their sensitivity to power structures and social coercions. At every stage of the module, the issues will be explored through the reading of biblical texts and scholarly interpretations of these.</p>				
<b>Programme module type:</b>	Either DI3714 or DI3715 is compulsory for Single Honours Biblical Studies, MTheol, BD, and Theological Studies Optional for Joint Honours Biblical Studies, Hebrew, New Testament			
<b>Pre-requisite(s):</b>	DI2000 or DI2001 or DI2003	<b>Anti-requisite(s):</b>	DI3714	
<b>Co-requisite(s):</b>	DI3713			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof M Aguilar			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Aguilar			

DI4015 Communication in Divinity				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module is part of the 'Communication and Teaching in Arts and Humanities' in which students gain substantial experience of a working environment. This component offers the opportunity to further develop an area of interest in communicating themes of Divinity to contemporary contexts. It is available only to participants in the placement module.</p>				
<b>Programme module type:</b>	Optional for Single Honours Biblical Studies, MTheol and Theological Studies			
<b>Co-requisite(s):</b>	ID4002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 hours of individual supervision per semester.			
	<b>Scheduled learning:</b> 3 hours		<b>Guided independent study:</b> 147 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Stoddart			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Stoddart			

## Divinity - Honours Level - 2014/15 – August 2014

DI4497 Honours Dissertation in Divinity (45)				
<b>SCOTCAT Credits:</b>	45	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students concurrently taking ID4002			
<b>Planned timetable:</b>	To be arranged.			
<p>This module involves a full-year independent research project, developed under the supervision of a member of staff. The student is free to develop his/her project out of his/her own interests, providing it is academically defensible and falls within the academic areas covered by the School of Divinity. Students will work towards the completed dissertation in graded stages, preparing a research bibliography, a preliminary paper including literature review and methodology discussion before writing the dissertation itself. Students will also be required to deliver graded presentations on their dissertations.</p> <p>Seminars will run fortnightly to provide support to students, with some of these given over to linking the project and skills acquired thereby with the demands of employability.</p>				
<b>Programme module type:</b>	Optional for Theological Studies, Biblical Studies, New Testament, M.Theol, BD			
<b>Co-requisite(s):</b>	ID4002	<b>Anti-requisite(s):</b>	DI4499, DI4498	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 hours with supervisor and 22 seminar hours over the year.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 422 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D Moffitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Moffitt			

DI4498 Honours Dissertation in Divinity (BD-30)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 & 2 (taught twice)
<b>Availability restrictions:</b>	Only available to students in BD programme, who entered the programme prior to 2013-14.			
<b>Planned timetable:</b>	To be arranged.			
<p>This project enables a student to research a special topic of his/her choice (in consultation with staff) and to develop it at length in dissertation form. The length of the dissertation should be approximately 10,000 words, and must not in any case exceed 12,000 words (to include text, footnotes and appendices). It must be submitted by the end of the semester. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for BD (for those entering Honours prior to 2014-15)			
<b>Anti-requisite(s):</b>	DI4501, DI4497, DI4499			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 hours of individual supervision and 11 seminar hours over the semester			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 283 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr D Moffitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Mofitt			

DI4499 Honours Dissertation in Divinity: Full Year				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
<p>This module involves a full-year independent research project, developed under the supervision of a member of staff. The student is free to develop his/her project out of his/her own interests, providing it is academically defensible and falls within the academic areas covered by the School of Divinity. Students will work towards the completed dissertation in graded stages, preparing a research bibliography, a preliminary paper including literature review and methodology discussion before writing the dissertation itself. Students will also be required to deliver graded presentations on their dissertations. Seminars will run fortnightly to provide support to students, with some of these given over to linking the project and skills acquired thereby with the demands of employability. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for BD, MTheol, Single Honours Biblical Studies, Single Honours Theological Studies Optional for Joint Honours Biblical Studies, Hebrew, New Testament, Theological Studies			
<b>Anti-requisite(s):</b>	DI4497, DI4498			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 hours individual supervision and 22 seminar hours over the year			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 572 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D Moffitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Moffitt			

DI4524 Scottish Spirituality				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will explore the key texts and movements of Scottish Christian spirituality from early mediaeval times through to the twentieth century. It will consider the impact of monasticism and pilgrimages, Calvinist reformation and Presbyterianism, the Romantic movement and Enlightenment and Celtic revivalism as well as considering what the indigenous, distinctly Scottish character of spirituality through industrial and post-industrial times might be.</p>				
<b>Programme module type:</b>	Optional for Theological Studies, BD and MTheol			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Rev Dr I Bradley			
<b>Lecturer(s)/Tutor(s):</b>	Rev Dr I Bradley, Dr M Elliott			

## Divinity - Honours Level - 2014/15 – August 2014

DI4526 Christian Mysticism Through the Ages				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will introduce students to the extensive and rich literature on Christian mysticism from the early Church through the twentieth century. Various approaches to studying the phenomenon of mysticism will be considered. The focus of the module will be a close examination of the writings of Christian mystics themselves, with attention given to their varied descriptions and analyses of encounter and union with the divine, and the implications of mystical experience for personal transformation and growth in Christ. Texts and writers will include, among others, Thomas Merton, Teresa of Avila, John of the Cross, Meister Eckhart, The Cloud of Unknowing, and Julian of Norwich.</p>				
<b>Programme module type:</b>	Optional for Theological Studies, BD and MTheol			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 x 2-hour seminar, 2 additional hours over semester meeting with coordinator.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 265 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr W Hyland			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Hyland			

DI4550 Baylor University Module				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to Baylor University students.			
<b>Planned timetable:</b>	To be arranged.			
Description to follow.				
<b>Programme module type:</b>	Baylor University programme.			
<b>Pre-requisite(s):</b>	Baylor University programme.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100% (To be confirmed)			
<b>Module Co-ordinator:</b>	Baylor Programme Director			
<b>Lecturer(s)/Tutor(s):</b>	Baylor Programme Director			



DI4551 Baylor University Module				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to Baylor University students.			
<b>Planned timetable:</b>	To be arranged.			
Description to follow.				
<b>Programme module type:</b>	Baylor University programme.			
<b>Pre-requisite(s):</b>	Baylor University programme.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100% (To be confirmed)			
<b>Module Co-ordinator:</b>	Baylor Programme Director			
<b>Lecturer(s)/Tutor(s):</b>	Baylor Programme Director			

DI4628 Epistle to the Hebrews: English Text				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>The purpose of this module is to read the Epistle to the Hebrews carefully and discerningly and discuss the fruits of our close readings. As a means to that end, we will examine critical issues in interpretation and survey selected scholarly literature. Throughout the module, we will reflect upon matters of historical, hermeneutical and theological concern as these arise from our reading of the text, including issues such as: Hebrews' appeal to the OT, relationship to the rest of the NT, Christology, supersessionism, engagement Greco-Roman culture and philosophy, eschatological reflection, and the possible ethical and theological implications of the text.</p>				
<b>Programme module type:</b>	Optional for Biblical Studies, New Testament, BD and MTheol			
<b>Pre-requisite(s):</b>	DI3711, DI3712			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr D Moffitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Moffitt			

## Divinity - Honours Level - 2014/15 – August 2014

DI4629 Epistle to the Hebrews: Greek Text				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The purpose of this module is to introduce students to the Epistle to the Hebrews in Greek. As a means to that end, we will discuss the grammar, syntax, and vocabulary of the text. We will also examine critical issues in the interpretation of Hebrews and survey selected scholarly literature. Throughout the module, we will reflect upon matters of historical, hermeneutical and theological concern as these arise from our reading of the text, including issues such as: Hebrews' appeal to the LXX, relationship to the rest of the NT, Christology, supersessionism, engagement Greco-Roman culture and philosophy, eschatological reflection, and the possible ethical and theological implications of the text.</p>				
<b>Programme module type:</b>	Optional for Biblical Studies, New Testament, BD and MTheol			
<b>Pre-requisite(s):</b>	DI1005, DI2201, DI3711, DI3712			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr D Moffitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Moffitt			

DI4630 The Gospel of Mark: English Text				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module aims to help students develop skills in the interpretation of the Gospel of Mark, giving particular attention to the appreciation of the text's literary and theological contribution to the New Testament. This module focuses primarily on the narrative interpretation of the text, while also giving attention to its key historical and social features. The module explores: (1) relevant background issues (e.g., authorship, provenance, and purpose), (2) selected textual and interpretive issues that are important or disputed within contemporary scholarship, (3) hermeneutical issues related to reading an ancient text in today's world.</p>				
<b>Programme module type:</b>	Optional for Biblical Studies, New Testament, BD and MTheol			
<b>Pre-requisite(s):</b>	DI3712			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr E Shively			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Shively			

DI4631 The Gospel of Mark: Greek Text				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module aims to help the student develop a range of skills necessary to exegete the Greek text of the New Testament with greater confidence, using the Gospel of Mark as a case study. The module explores: (1) relevant background issues (e.g., authorship, provenance, and purpose), (2) the Markan narrative in its literary and theological context, (3) textual issues that foster a more advanced facility with the Greek language and a better understanding of Greek texts, (4) interpretive issues important or disputed within contemporary scholarship, and (5) hermeneutical issues related to reading an ancient text in today's world.</p>				
<b>Programme module type:</b>	Optional for Biblical Studies, New Testament, BD and MTheol			
<b>Pre-requisite(s):</b>	DI1006, DI3712			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr E Shively			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Shively			

DI4632 Reading in the Greek New Testament				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Building on the competencies learned in DI2201, students will gain familiarity with advanced grammatical concepts and syntactical relationships as they are encountered inductively through the reading of primary texts. In addition, students will learn to use and evaluate a standard reference work regarding intermediate Koine Greek grammar as they learn to analyze the primary texts by using the syntactical categories of contemporary scholarship. Finally, in order to facilitate future reading, students will increase their vocabulary by mastering every word that occurs 25 times or more in the Greek New Testament.</p>				
<b>Programme module type:</b>	Optional for Biblical Studies, New Testament, Theological Studies, MTheol and BD			
<b>Pre-requisite(s):</b>	DI1005, DI2201			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr S Hafemann			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Hafemann			

## Divinity - Honours Level - 2014/15 – August 2014

DI4700 Hebrew Prose and Poetry			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
This module aims to extend students' skills in reading the Hebrew Bible and in the techniques of textual criticism and of exegesis. It consists of the reading and studying of a selection of Hebrew biblical texts representative of different literary genres such as prose writing, prophetic literature, psalms and wisdom literature.			
<b>Programme module type:</b>	Optional for Biblical Studies, Hebrew, BD and MTheol		
<b>Pre-requisite(s):</b>	DI1004 and 11 or better in DI2002		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3-hour seminar.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Prof J Davila		
<b>Lecturer(s)/Tutor(s):</b>	Prof J Davila		

DI4711 Old Testament Special Topic			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
The Religions of Ancient Israel This module explores the religions of ancient Israel through the study of the Old Testament/Hebrew Bible in English and other ancient Near Eastern sources. The aim is to examine the various concepts fundamental to the religions of ancient Israel (e.g. ideas of divinity, monotheism, creation, revelation) and the institutions through which such ideas were articulated (e.g. temple, monarchy, prophecy, cult). Primary importance will be placed on the biblical text, but students will also be exposed to more theoretical questions vis-à-vis religious practice (e.g. what is sacrifice and how does it work?), as well the material culture of such practice as narrated by Israel's archaeology and material culture.			
<b>Programme module type:</b>	Optional for Biblical Studies, Hebrew, New Testament		
<b>Pre-requisite(s):</b>	DI2001		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Dr M Nevader		
<b>Lecturer(s)/Tutor(s):</b>	Dr M Nevader		

DI4726 Hebrew Readings				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module intends to acquaint the student with a range of Hebrew Readings. Three areas of specialisation will be pursued: text criticism, exegesis, and reading and translating texts from the Old Testament, with a particular focus on the last of these. Text criticism is an advanced subject area, requiring cognate language skills and detailed work in the history of the Hebrew language. To this end, the module will familiarise students with the textual apparatus of (BHS) Biblia Hebraica Stuttgartensia and will attend to the logic of text-critical decisions deployed by the standard technical commentary series, notably The International Critical Commentary Series and the Hermenia Commentary Series.</p>				
<b>Programme module type:</b>	Optional for Biblical Studies, Hebrew, BD and MTheol			
<b>Pre-requisite(s):</b>	DI1004 and 11 or better in DI2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr W Tooman			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Tooman			

DI4730 The Book of Daniel				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces the Book of Daniel, one of the most mysterious and fascinating books in the Hebrew Bible. The class will explore modern critical interpretations of the book, which seek to understand it as an apocalypse in its original historical context. We will also explore the history of the book's interpretation, from responses in the Second Temple Period and the New Testament to Jewish and Christian responses in antiquity and the Middle Ages to modern popular (mis-)interpretations. All readings will be in English.</p>				
<b>Programme module type:</b>	Optional for Biblical Studies, Hebrew, BD and MTheol			
<b>Pre-requisite(s):</b>	11 or better in DI2001			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof J R Davila			
<b>Lecturer(s)/Tutor(s):</b>	Prof J R Davila			

## Divinity - Honours Level - 2014/15 – August 2014

DI4800 Theology and Pastoral Care				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module is designed to introduce students to the subject of pastoral care and counselling from theological and spiritual perspectives. It considers the historical development of pastoral and spiritual care in the Christian tradition, whilst giving most attention to contemporary models of pastoral care. Students will explore life-long pastoral care, disability, care in the context of sexuality, mental illness, health, death and grief.				
<b>Programme module type:</b>	Optional for Theological Studies and MTheol			
<b>Pre-requisite(s):</b>	11 or better in DI2000			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr E Stoddart			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Stoddart			

DI4824 Theology in Latin America				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module explores the history and development of theology in Latin America from 1968 to 2004, the period from the Conference of Medellin (1968) to the publication of Petrella's <i>The Future of Liberation Theology</i> (2004). The module considers the work of Gutiérrez, Boff, Irarrazábal, Támez, and Romero among others and their contribution to contemporary eco-theology, inculturation and political theology.				
<b>Programme module type:</b>	Optional for Theological Studies and MTheol			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 x 2-hour seminar			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof M Aguilar			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Aguilar			

DI4825 Theology in Africa				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module explores the history and development of theology in Africa from the post-colonial period - 1960s to the 1990s. The module considers the work of Aylward Shorter, V.Y. Mudimbe and F. Kabasele Lumbala among others and their contribution to post-colonial theology, a theology of inculturation and liturgical theology in Africa.				
<b>Programme module type:</b>	Optional for Theological Studies, BD and MTheol			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof M Aguilar			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Aguilar			

DI4827 Christian Ethics and Contemporary Society				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module explores Christian responses to a number of contemporary moral issues. We will compare how various Christian responses differ among themselves over history and how they differ from those offered by non-Christians. Our goal is to better understand the historical and theoretical background to common moral arguments nowadays; often we are familiar with the arguments without perceiving their presuppositions or genealogies. In particular, we will seek to understand how Christian ethics relates to the ethos of liberal democracy, which is oriented toward rights, freedom, and equality. Is Christian ethics fundamentally compatible with, or in tension with, values such as freedom of speech and a secular state? We seek to answer this question by careful study of issues such as abortion, euthanasia, global poverty, the use of religious reasons in public debate, same-sex marriage, and war.				
<b>Programme module type:</b>	Optional for Theological Studies, BD and MTheol			
<b>Pre-requisite(s):</b>	DI2001			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J Perry			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Perry			

Divinity - Honours Level - 2014/15 – August 2014

DI4924 Theology and Imagination				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module will examine the nature and status of the imagination and its role in religious contexts. We will consider a range of approaches or modes of theological engagement with the arts, though we will also consider a variety of artworks, in different media - such as popular music and science fiction - as a way of testing the cogency of these models and exploring the possibility that works of art may be able to do things that propositional theological discourse cannot.				
<b>Programme module type:</b>	Optional for Theological Studies, and MTheol			
<b>Pre-requisite(s):</b>	DI1001, DI2000			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination= 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr G Hopps			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Hopps			

DI4928 Theological Anthropology				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module considers what it is to be a self or person in dialogue with issues raised by the sciences, philosophy of mind and theology. The module is divided into two parts. The first considers a) the impact of Descartes on the theological debate; b) contemporary dualist and physicalist debates with an eye to developments in neuroscience; and c) the nature of the self-relation (self-awareness, self-understanding, self-knowledge, self-governance) together with associated issues relating to moral autonomy and agency. The second part engages primarily with the contrasting theological anthropologies of Karl Rahner and Karl Barth but also with those of contemporary personalist and feminist theologians.				
<b>Programme module type:</b>	Optional for Theological Studies and MTheol			
<b>Pre-requisite(s):</b>	11 or better in DI2000			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof A Torrance			
<b>Lecturer(s)/Tutor(s):</b>	Prof A Torrance			



DI4939 Creation and Providence				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged			
<p>The module treats the Christian doctrines of creation and providence. Particular attention will be devoted to the material content of teaching about creation and providence and its place in the overall system of Christian doctrine, to pre-modern formulations of teaching about creation and providence in their doctrinal and metaphysical dimensions, to the pressures exerted upon teaching about creation and providence in modernity; the prospects for constructive articulation of teaching about creation and providence. The first half treats the elements and history of the doctrine of creation: the way creation is known; God as the agent of creation; the divine action of creation; the natures and ends of creatures; the second half treats the elements and history of the doctrine of providence: knowledge of providence; providence and the nature of God; the divine act of providence; nature and history as the spheres of providence. The module concludes with consideration of the relation between creation, providence and the divine work of reconciliation. This module provides an opportunity for the study of Christian teaching about creation and divine providence in its historical and systematic dimensions, and for reflection on some characteristic modern questions about the topic.</p>				
<b>Programme module type:</b>	Optional for Theological Studies, MTheol and BD			
<b>Pre-requisite(s):</b>	DI3701, DI3702			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof J Webster			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Webster			

**Interdisciplinary (ID) module**

ID4002 Communication and Teaching in Arts and Humanities			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Available only to students in the Schools of Divinity, Geography & Geosciences, History, International Relations, Modern Languages or Departments of Philosophy.		
<b>Planned timetable:</b>	To be arranged.		
This module provides final year students within the Faculties of Arts and Divinity with the opportunity to gain first hand experience of education through a mentoring scheme with teachers in local schools. This module will enable students to gain substantial experience of working in a challenging and unpredictable working environment, and to gain a broad understanding of many of the key aspects of teaching in schools.			
<b>Programme module type:</b>	Optional for Classics, Divinity, Geography, History, International Relations, Modern Languages, Philosophy or Social Anthropology.		
<b>Co-requisite(s):</b>	If taken within Divinity, History, International Relations or Philosophy, a further 15-credit subject-specific module may be required. TBC		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> The module commences with an Induction Event at the University (3 hours). Students spend a minimum of 20 hours during the semester at their placement. 3 x 1-hour tutorials are held at the University during the semester. The module concludes with an oral presentation session.		
	<b>Scheduled learning:</b> 28 hours	<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%		
	<b>As used by St Andrews:</b> Coursework = 100% comprising: Written project proposal (10%) + written report (35%) = 45% Oral presentation (at University, assessed by module lecturers) = 30% A further 25% of Coursework is in the form of a report by their placement-mentor on the student's practical performance in the classroom on placement.		
<b>Module Co-ordinator:</b>	Dr E Stoddart		
<b>Lecturer(s)/Tutor(s):</b>	Dr E Stoddart		

## School of Economics & Finance

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Economics (EC) modules

<b>EC3201 Advanced Microeconomics</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Availability restrictions:</b>	Not normally available to General Degree Students.		
<b>Planned timetable:</b>	10.00 am Mon, Tue and Wed		
The module is designed to provide an advanced understanding of selected but central topics in microeconomics. The subjects dealt with are: the consumer theory, firm theory, general equilibrium, decision uncertainty, game theory, monopoly, oligopoly, market failure and welfare economics. Students will learn how to use formal analytical models to solve various theoretical and policy related problems, and strengthen their understanding of core microeconomic concepts, such as (ir)rational behaviour, market (in)efficiency and social (in)equality.			
<b>Programme module type:</b>	Compulsory for Applied Economics, Applied Quantitative Finance (MSci), Economics, Financial Economics, BA (Int Hons) Economics		
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004	<b>Required for:</b>	EC4203
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures (x 9 weeks), plus 1 office hour (x 12 weeks), 4 x 1-hour tutorial and 4 x 1-hour laboratories		
	<b>Scheduled learning:</b> 47 hours	<b>Guided independent study:</b> 253 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 85%, Practical Examinations = 0%, Coursework = 15%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 70%, Coursework = 30%		
<b>Module Co-ordinator:</b>	Dr J Jin		
<b>Lecturer(s)/Tutor(s):</b>	Dr M Negri		

## Economics & Finance - Honours Level - 2014/15 - August 2014

EC3202 Econometrics 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Thu and Fri			
This module introduces the student to the classical linear regression model and some extensions. The module also develops the student's understanding of the key concepts of statistical analysis and their application in economics. The skills that the student will acquire include the ability to estimate, interpret and test economic relationships. These are essential components of the toolkit of a trained economist and are transferable skills in relation to many types of career.				
<b>Programme module type:</b>	Compulsory for Applied Economics, Economics, Financial Economics, BA (Int Hons) Economics			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004	<b>Required for:</b>	EC4202	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 8 weeks), plus 1 office hour (x 12 weeks), 6 x 1-hour tutorials and 3 x 2-hour laboratories.			
	<b>Scheduled learning:</b> 40 hours		<b>Guided independent study:</b> 110 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 70%, Coursework (Class Test) = 30%			
<b>Module Co-ordinator:</b>	Dr L Morin			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Stefanski			

EC3203 Advanced Macroeconomics				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon, Tue and Wed			
The module is designed to provide an advanced understanding of monetary theory 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. Topics may include: models of growth, real business cycle theory, models of the demand for money and the supply of money, formal AD/AS models with rational expectations, models of the determination of the exchange rate, the issue of time inconsistency in monetary policy and New Keynesian macroeconomics.				
<b>Programme module type:</b>	Compulsory for Applied Economics, Economics, Financial Economics, BA (Int Hons) Economics			
<b>Pre-requisite(s):</b>	C2001, EC2002, EC2003, EC2004	<b>Required for:</b>	EC4203	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures (x 9 weeks), plus 1 office hour (x 12 weeks), 4 x 1-hour tutorial and 4 x 1-hours laboratories. 3 lectures (x 8 weeks), plus 8 tutorials.			
	<b>Scheduled learning:</b> 47 hours		<b>Guided independent study:</b> 253 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 85%, Practical Examinations = 0%, Coursework = 15%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 70%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Dr A Trew			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Stefanski			

EC4201 Economic Analysis			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	10.00 am Mon, Tue and Wed		
The module is designed to provide an advanced understanding of current economic theory, covering both macroeconomics and microeconomics. The macroeconomic content of the module will include models of the microfoundations of money; aspects of economic growth, such as the Ramsey model and the question of endogenous growth; and a range of issues on real business cycle models. The microeconomic content of the module will cover game theory, with a particular attention placed on the theory and applications of simultaneous games and dynamic games.			
<b>Programme module type:</b>	Compulsory for Single Honours Economics, Financial Economics, BA (Int Hons) Economics. Optional for Joint Honours Economics		
<b>Pre-requisite(s):</b>	EC3201, EC3202, EC3203	<b>Required for:</b>	EC4204
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures (x 9 weeks), plus 1 office hour (x 12 weeks) plus 8 x 1-hour tutorials.		
	<b>Scheduled learning:</b> 47 hours	<b>Guided independent study:</b> 253 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 70%, Coursework = 30%		
<b>Module Co-ordinator:</b>	Dr O Senay		
<b>Lecturer(s)/Tutor(s):</b>	Dr O Senay, Dr K Ozbek		

## Economics & Finance - Honours Level - 2014/15 - August 2014

EC4202 Econometrics 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 & 2 (taught twice)
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Thu and Fri			
The module seeks to equip students with advanced skills in data analysis by introducing methods for estimating time series, cross-section and panel models. These skills include the ability to explain and interpret models with limited dependent variables, endogenous covariates, unobserved heterogeneity and non-stationary variables. The module builds upon the knowledge of the linear regression model acquired in EC3202.				
<b>Programme module type:</b>	Compulsory for Single Honours Economics, Financial Economics, BA (Int Hons) Economics. Optional for Joint Honours Economics			
<b>Pre-requisite(s):</b>	EC3202	<b>Required for:</b>	EC4204	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 8 weeks), plus 1 office hour (x 12 weeks), 6 x 1-hour tutorials and 3 x 2-hour laboratories.			
	<b>Scheduled learning:</b> 40 hours		<b>Guided independent study:</b> 110 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 70%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Dr I Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Smith			

EC4203 Contemporary Issues				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Thu and Fri			
The module is designed to show students how to use economic analysis to understand a range of contemporary economic policy issues. It will cover a range of topics such as bargaining between firms and unions, regulation, the economics of the European Community, stability of nations, eating disorders, the economics of global warming and carbon taxes. The exact list of topics will vary between years.				
<b>Programme module type:</b>	Compulsory for Single Honours Economics. Optional for Applied Economics, Joint Honours Economics, Financial Economics			
<b>Pre-requisite(s):</b>	EC3201, EC3202, EC3203			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 10 weeks), plus 1 office hour (x 12 weeks)			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Selvaretnam			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Gerasimou, Prof A Hughes-Hallett, Dr J Jin, Dr L Savorelli, Dr G Selvaretnam			

EC4204 Financial Economic Theory			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	12.00 noon Mon, Wed, Fri		
<p>This module is an introduction to the theoretical development of asset pricing models. Whereas EC4501 and EC4502 emphasise the solution of small case-studylike 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 implications of pricing models for evaluating portfolio performance are also studied in depth. There is also extensive coverage of the theoretical foundations of option pricing. The binomial approach and its extensions to multinomial option pricing and, ultimately, the derivation of the Black-Scholes formula are studied.</p>			
<b>Programme module type:</b>	Compulsory for Financial Economics Optional for Economics		
<b>Pre-requisite(s):</b>	EC4501, EC4502, EC4201, EC4202		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures/seminars (x 9 weeks), plus 1 office hour (x 12 weeks).		
	<b>Scheduled learning:</b> 39 hours	<b>Guided independent study:</b> 269 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 85%, Practical Examinations = 0%, Coursework = 15%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 70%, Coursework = 30%		
<b>Module Co-ordinator:</b>	Dr T Diasokos		
<b>Lecturer(s)/Tutor(s):</b>	Dr T Diasokos		

Economics & Finance - Honours Level - 2014/15 - August 2014

EC4205 Economic Policy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students in the second year of the Applied Economics Honours Programme.			
<b>Planned timetable:</b>	4.00 pm - 6.00 pm Tue			
<p>The module will study a range of contemporary topics in economic policy. It will introduce students to analyses of the choices confronting policy makers. The subject matter will range from the study of how individual markets can and should work to the broadest interactions in the world economy. The module will draw heavily on contemporary studies published by policy think tanks such as the CEPR, IFS, PSI and IPPR. Because the policy agenda is continually changing, the actual topics covered in the module will vary from year to year. Examples of topics that might be covered would be public/private partnerships, pension reform, the funding of higher education, competition policy, regulation, trade policy, technology policy and the economic issues of EU enlargement.</p>				
<b>Programme module type:</b>	Compulsory for Applied Economics			
<b>Pre-requisite(s):</b>	EC3201, EC3202, EC3203			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 9 weeks), plus 1 office hour (x 12 weeks) plus 5 x 1-hour tutorials.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 265 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 70%, Practical Examinations = 15%, Coursework = 15%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr L Savorelli			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Savorelli, Dr M Negri, Dr S Zhang			



**Economics & Finance - Honours Level 2014/15 - August 2014**

<b>EC4300 Dissertation in Economics</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students in the second year of the Single Honours Economics or Single Honours Financial Economics Programmes.			
<b>Planned timetable:</b>	None, but attendance at the departmental research colloquia required.			
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 selected by the student and agreed with their supervisor and the Director of Teaching. The maximum number of words allowed is 15,000 for the EC4300 dissertation but students will be advised to cover the topic in around 10,000-12,000 words.				
<b>Programme module type:</b>	Compulsory for BA (Int Hons) Economics. Optional for Single Honours Economics, Financial Economics			
<b>Pre-requisite(s):</b>	EC3201, EC3202, EC3203			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures and 3 supervision meetings per semester.			
	<b>Scheduled learning:</b> 5 hours		<b>Guided independent study:</b> 295 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%			
	<b>As used by St Andrews:</b> Dissertation = 85%, Coursework = 15%			
<b>Module Co-ordinator:</b>	Dr P Macmillan			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Macmillan			

<b>EC4302 Research Project</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students in the second year of the Single Honours Applied Economics Programmes or of a joint degree involving Economics.			
<b>Planned timetable:</b>	None, but attendance at the departmental research colloquia required.			
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 by the student and approved by their supervisor and the Director of Teaching. 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. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a> )				
<b>Programme module type:</b>	Optional for Applied Economics, Joint Honours Economics			
<b>Pre-requisite(s):</b>	EC3201, EC3202, EC3203			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures and 3 supervision meetings per semester.			
	<b>Scheduled learning:</b> 5 hours		<b>Guided independent study:</b> 295 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%			
	<b>As used by St Andrews:</b> Dissertation = 85%, Coursework = 15%			
<b>Module Co-ordinator:</b>	Dr P Macmillan			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Macmillan			

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EC4501 Capital Investment Analysis			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	3.00 pm Thu, Fri		
<p>This module introduces the basic concepts of investment value analysis. The ultimate aim is to provide the student with a standard approach to define, measure and predict the 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 investment analysis problems. 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.</p>			
<b>Programme module type:</b>	Compulsory for Applied Quantitative Finance (MSci), Financial Economics. Optional for Economics, Applied Economics		
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004	<b>Required for:</b>	EC4204, EC4502
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 8 weeks) plus 1 office hour (x 12 weeks) and 3 seminars in total.		
	<b>Scheduled learning:</b> 31 hours	<b>Guided independent study:</b> 119 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr G Shea		
<b>Lecturer(s)/Tutor(s):</b>	Dr G Shea		

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<b>EC4502 Corporate Finance</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	3.00 pm Thu, Fri			
<p>In this module we investigate the problem of how a collection of corporate liabilities is affected in value by corporate actions. Possible actions include corporate investment decisions, decisions regarding the firm's financial structure, changes in management rules and compensation and changes in the scope, specialisation and legal environment of the corporation's business. As in the 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.</p>				
<b>Programme module type:</b>	Compulsory for Applied Quantitative Finance (MSci), Financial Economics. Optional for Economics, Applied Economics			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004, EC4501	<b>Required for:</b>	EC4204	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 8 weeks) plus 1 office hour (x 12 weeks) and 3 x 1-hour laboratories.			
	<b>Scheduled learning:</b> 31 hours		<b>Guided independent study:</b> 119 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Shea			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Shea			

<b>EC4503 The Economics of Innovation</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	To be arranged.			
<p>Innovation is both a major contributory factor in economic growth and a crucial element of competitive behaviour and policy. The aim of this module is to introduce students to recent developments in the economic theory of innovation. The module, which is analytical in nature, examines the incentives firms have to innovate by the introduction of new products and new processes and, in particular, how this is affected by strategic competitive conditions.</p>				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M La Manna			
<b>Lecturer(s)/Tutor(s):</b>	Dr M La Manna			

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EC4504 Economics of Social Life				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	To be arranged.			
This module considers the application of microeconomic theory to various aspects of non-market social activity not generally considered to be economic in character. Much of the material focuses on the household production model introduced by Gary Becker, and its various applications to marriage, divorce, sleep, fertility, addiction and religion. In addition, there will be some consideration of the economics of courtship, nonmarital births and social preferences				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr I Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Smith			

EC4505 Environmental Economics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
The aim of this module is to introduce basic ideas and methods of environmental economics and policy building on a knowledge of economics. The background and current state of global warming is related to international efforts to control the problem and the activities of energy lobbies. A variety of economic, environmental and public policy considerations will be discussed including international trade, tropical deforestation, urban transport, sustainability of economic development, and the relationship between economic (material) growth, the environment, and human happiness and welfare. Specific problems of developing countries and their relations to the developed world will be studied.				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci), Sustainable Development			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 7.5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof N Hanley			
<b>Lecturer(s)/Tutor(s):</b>	Prof N Hanley			

EC4506 Experiments in Economics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	To be arranged.			
The purpose of this module is to expose students to the methodology of experimental economics and to give an overview of some of its uses in different areas of economics. We will study how experimental economics can inform our knowledge of how markets operate, the effects of institutions on the decisions of economic agents, and public policy issues. Topics covered will be selected from the following: trading mechanisms, market power, forward and spot markets, financial asset markets, public good games, charitable fund-raising, externalities, common pool resources, statistical discrimination and prediction markets. The material is designed so as to allow the student hands-on experience of participating in demo experiments.				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 10 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof M Costa-Gomes			

EC4507 Behavioural Economics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged			
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.				
<b>Programme module type:</b>	This is an optional module of the MA in Single Honours Economics, Applied Economics and Joint Honours with Economics			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures (x 7 weeks), plus 1 office hour (x 12 weeks), 1-hour tutorials (x 4 weeks)			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework (2 class tests) = 40%			
<b>Module Co-ordinator:</b>	Prof M Costa-Gomes			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Gerasimou			

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EC4508 Industrial Organisation				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
This module is an analytical treatment of industrial organisation in a dynamic context, providing rigorous coverage of core areas of the subject, supported mostly by both theoretical models and some econometric studies. The Topics covered are as follows: Models of intra-industry competition, including discussion in game theoretic terms; market structures, economies of scale, entry and exit; product differentiation, innovation; mergers.				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof D Ulph			

EC4509 International Finance				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
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. Some of the topics covered include exchange rates and the balance of payments, prices and financial markets in an open economy, and monetary models of exchange rate determination.				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Forgues-Puccio			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Forgues-Puccio			

EC4510 Issues in Economic Policy				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	4.00 pm - 6.00 pm Tue			
The module will study a range of contemporary topics in economic policy. It will introduce students to analyses of the choices confronting policy makers. The subject matter will range from the study of how individual markets can and should work to the broadest interactions in the world economy. The module will draw heavily on contemporary studies published by policy think tanks such as the CEPR, IFS, CEPA, PSI and IPPR. Because the policy agenda is continually changing, the actual topics covered in the module will vary from year to year. Examples of topics that might be covered would be public/private partnerships, pension reform, the funding of higher education and competition policy, regulation, trade policy, technology policy and the economic issues of EU enlargement.				
<b>Programme module type:</b>	Optional for Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004	<b>Anti-requisite(s):</b>	EC4205	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr L Savorelli			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Savorelli, Dr M Negri, Dr S Zhang			

EC4511 Labour Economics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	To be arranged.			
Core microeconomics modules provide the basic tools for the understanding of labour economics. This module aims to build upon these foundations, examining in some detail a series of topics of interest within the labour economics field. These include the functioning of labour markets, and how wages, employment and unemployment are determined. In particular, the role of differing institutions across countries and how they influence labour market outcomes will be explored.				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Zhang			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Koutmeridis			

## Economics & Finance - Honours Level - 2014/15 - August 2014

EC4512 Law and Economics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
<p>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, tort and criminal law through the application of economic models and techniques. Legal cases are not studied in detail. Rather the approach is to use advanced economic theory to investigate the consequences of alternative legal rules and their implications for designing the legal system.</p>				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr I Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Smith			



EC4513 The Macroeconomics of European Integration				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	To be arranged.			
<p>The purpose of the module is to explore the economic and monetary issues involved in European economic integration. After an introduction focused on the question of why the members of the EC/EU have sought a single market, exchange rate stability and then monetary union, the module provides a thorough examination of the theory of optimum currency areas, including both traditional and modern approaches, and both theoretical and empirical European-related research. It then investigates the advantages of a single market, the extent to which this has led to convergence between the EU economies, the workings of the pre-EMU European monetary arrangements and the importance of an independent central bank. The monetary policy strategy of the ECB will then be considered and the relationship between fiscal and monetary policy and the desirability of stability pact limits on fiscal policy will be examined and how to achieve sustainable policies. Finally, we will examine and evaluate the experience of EMU.</p>				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof A Hughes-Hallett			
<b>Lecturer(s)/Tutor(s):</b>	Prof A Hughes-Hallett			

EC4514 Monetary Policy				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
<p>The module is designed to provide a specialised understanding of monetary policy issues. The lectures cover the aims of monetary policy, the use of alternative monetary policy frameworks, the issue of central bank independence, and current topics such as interest rate smoothing. The last part of the module surveys the experience of major countries with different policy frameworks over the last quarter of a century.</p>				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof A Hughes-Hallett			
<b>Lecturer(s)/Tutor(s):</b>	Prof A Hughes-Hallett			

## Economics & Finance - Honours Level - 2014/15 - August 2014

EC4519 Development Economics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
<p>The module covers some important theoretical and practical aspects of development economics. In low income countries markets often fail, wealth can be distributed very unequally and the quality of governance can be variable. International markets matter for trade and aid while international bodies such as the World Bank play a crucial role. Understanding the causes of underdevelopment can help us understand how to unlock the sustained growth experienced by developed economies. Specific topics can include income inequality, poverty, education, corruption, gender, foreign investment, aid, microfinance and international trade policy. The course will draw on evidence across countries and over time, with an emphasis on developing an analytical understanding of the applied issues.</p>				
<b>Programme module type:</b>	Optional for Economics, Applied Economics, Financial Economics, Applied Quantitative Finance (MSci)			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 9 weeks), plus 1 office hour (x 12 weeks).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Selvaretnam			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Selvaretnam			

EC4520 Economics of Inequality				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	To be arranged.			
<p>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 module. The driving forces of economic inequality and its relation to other economic criteria such as growth are analysed as well from a historical global perspective.</p>				
<b>Programme module type:</b>	Optional for Economics, Applied Economics.			
<b>Pre-requisite(s):</b>	EC2001, EC2002, EC2003, EC2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 7.5 weeks).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 135 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr T Cuhadaroglu			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Cuhadaroglu			

## School of English

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### English (EN) modules

EN3111 Beowulf			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	9.00 and 10.00 am Wed		
<p>This module introduces students to one of the strangest works of mediaeval literature, Beowulf. The hero's struggles against monsters, and the text's depiction of pagan aristocracies and tribal warfare will be studied in close readings and thematic study against the backdrop of Anglo-Saxon literary history and poetic conventions. Key aspects studied will include monstrosity, warfare, paganism, leadership, poetic composition, early mediaeval manuscript production, and the usage of electronic tools. The module will also range widely amongst related North Sea literature (Old English poetry, Old Norse sagas, mediaeval Latin, and modern folklore). Beowulf will be read in a glossed edition and in the original; supporting material will be read in translation. Some prior experience with reading Old English (e.g. through EN2003) is useful, but not necessarily required. (Group A)</p>			
<b>Programme module type:</b>	Group A Optional for English and BA (Intl Hons) English		
<b>Pre-requisite(s):</b>	EN2003, EN2004	<b>Anti-requisite(s):</b>	EN3010, ME3012
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar, and 2 optional consultative hours.		
	<b>Scheduled learning:</b> 44 hours	<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Dr C Rauer		
<b>Lecturer(s)/Tutor(s):</b>	Dr C Rauer		

English - Honours Level - 2014/15 - August 2014

EN3112 Chaucer's Canterbury Tales				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed			
This module consists of the study of Chaucer's Canterbury Tales for its individual tales and as a whole, with regard to such key features as genre, structure, mediaeval literary thought and gender. (Group A)				
<b>Programme module type:</b>	Group A Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr I R Johnson			
<b>Lecturer(s)/Tutor(s):</b>	Dr I R Johnson			

EN3141 Tragedy in the Age of Shakespeare				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon Tue and 2.00 pm Thu			
The aim of the module is to develop an understanding of different versions of tragedy in the English Renaissance. (Group B)				
<b>Programme module type:</b>	Group B Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 tutorial and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Shinn and Dr T Johnson			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Shinn and Dr T Johnson			

EN3142 Renaissance Literature: Texts and Contexts				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Tue and 12.00 noon Thu			
The aim of the module is to develop an understanding of some major literary texts of the Renaissance both in formalist terms and in terms of their historical and cultural context. Authors considered will include Spenser, Shakespeare, Jonson, Donne, Herbert, Marvell and Milton. (Group B)				
<b>Programme module type:</b>	Group B Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 tutorial, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof N P P Rhodes			
<b>Lecturer(s)/Tutor(s):</b>	Prof N P P Rhodes			

EN3162 Revolution and Romanticism: Literature, History and Society, 1789-1805				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Tue and 10.00 am Thu			
This module provides wide-ranging reading in the literature of the 1790s, with emphasis on the interaction between literature, history and political revolution during this decade. (Group C)				
<b>Programme module type:</b>	Group B Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours per week: seminars, lectures, or tutorials, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof N H Roe			
<b>Lecturer(s)/Tutor(s):</b>	Prof N H Roe			

English - Honours Level - 2014/15 - August 2014

EN3163 The Younger Romantics: Poetry and Prose (1810 - 1830)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Thu and 11.00 am Fri			
This module aims to acquaint students with the principal poetic and non-fictional prose texts of the second generation of English Romantic writers. (Group C)				
<b>Programme module type:</b>	Group C Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004	Required for:	EN4366	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours: seminars, lectures or tutorials, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof N H Roe			
<b>Lecturer(s)/Tutor(s):</b>	Prof N H Roe			

EN3164 Self and Society in the Victorian Novel				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm Tue and 10.00 am Fri			
This module is based on the close study of (typically) five Victorian novels. It will concentrate on two related thematic issues: the sense of social and historical change, and the search for coherence and stability in the self. Students will examine the way the novel both reflected and contributed to contemporary debate on such topics as the re-emergence of feminist argument, urbanisation, and evolutionary theory. Attention will also be given to the formal inventiveness of the Victorian novel, in particular the use of non-realist elements, and the different roles given to the narrators. (Group C)				
<b>Programme module type:</b>	Group C Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture per week, 1 fortnightly seminar and 1 fortnightly tutorial, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Mr P V Mallett			
<b>Lecturer(s)/Tutor(s):</b>	Mr P V Mallett			

EN3201 Literary Theory				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri			
This module is designed to allow students to acquaint themselves with the principal critical theories which have underlain the production of Western literary work from its beginnings in Greek antiquity. It forms part of the study of literary history available to students in the School and the Faculty. (Group E)				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 tutorial, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 50%, Written Examination = 50%			
<b>Module Co-ordinator:</b>	Dr A Raychaudhuri			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Raychaudhuri			

EN3202 Literature and Ecology				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Thu and 11.00 am Fri			
An introduction to the history of ecology-related literature from the transcendentalists to the present, including the nature writing tradition, ecocriticism and writing as ecology. Beginning with Emerson and Thoreau, we examine how a transcendentalist philosophy of nature influenced English-language works in the UK and USA; we also address a number of schools or trends, including feminist, regional, naturalist, Native American and other indigenous thinking, as well as the implications of ecocritical writing for a wider field, including other literary-critical approaches, economics and history. (Group E)				
<b>Programme module type:</b>	Group E Optional for English Optional for Sustainable Development			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 50%, Written Examination = 50%			
<b>Module Co-ordinator:</b>	Dr P Pass			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Pass			

English - Honours Level - 2014/15 - August 2014

EN3208 Scottish Verse				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Wed and 10.00 am Fri			
This module provides a survey of Scottish poetry that includes some detailed engagement with major poets such as Dunbar, Burns and MacDiarmid, as well as the opportunity to work with living writers. (Group E)				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture/seminar and 1 seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 50%, Written Examination = 50%			
<b>Module Co-ordinator:</b>	Prof R Crawford			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Crawford			

EN3210 Twentieth-Century American Drama				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Tue and 12.00 noon Thu			
This module aims to introduce students to 'classic' American plays of the twentieth century and to issues involved in the study of drama of any period. (Group E)				
<b>Programme module type:</b>	Group E Optional for English, section I for BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr P H Parry			
<b>Lecturer(s)/Tutor(s):</b>	Dr P H Parry			



EN3212 Modernist Literature: Making It New?				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Fri			
<p>This module will survey a representative sample of modernist fiction and poetry, providing an opportunity for the in-depth study of key conceptual shifts and formal innovations in modernist literature. Thematically, it will take as its central focus the question of how the modernist desire to break with the past and 'make it new' existed alongside an on-going interest in tradition and the past. We will consider topics such as Imagism and classicism; modernist uses of myth; the modernist pastoral; modernism and memory; exile and imagined return; and the anticipatory nostalgia of the 1930s. (Group E)</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 1-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr C M Alt			
<b>Lecturer(s)/Tutor(s):</b>	Dr C M Alt			

EN3213 Postcolonial Literature and Theory				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Mon and 12.00 noon Fri			
<p>A diverse and contested field, postcolonialism explores a world transformed by European exploration, exploitation and empire-building. This course examines literary representations of this world and will introduce students to a range of key texts, critical debates and theoretical concepts in postcolonial studies. Focusing, in particular (but not exclusively), on the legacies of the British empire, we will explore the work of writers from across Africa, the Caribbean, India and Britain in order to question the ways in which postcolonial literature and theory challenges our understanding of race, class, gender, language and the individual. How has the history of empire shaped the world in which we live? In what ways have writers responded to the pressures to both commemorate the colonial past and move beyond it? And, what role can literature play in the attempt to challenge the historical and political injustices of our postcolonial world? (Group E)</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr L M Burns			
<b>Lecturer(s)/Tutor(s):</b>	Dr L M Burns			

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EN3214 The Country and the City in Scottish Literature				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am - 11.00 am Mon and 10.00 am - 11.00 am Wed			
<p>What and where is Scotland? How have the cities and the countryside of Scotland been created over the last 200 years? And what are the internal and external borders of Scottish literature – psychologically, geographically and formally? By exploring Scottish novels – and poetry – from the early 19th century to the present day we examine the literary construction and deconstruction of Scotland through depictions of its rural and urban spaces. In particular, we analyse dystopian and utopian fantasies, green and gothic tendencies, and nostalgia both for the lost idyllic countryside and for gritty, urban ‘reality’, to ask if Scotland as a literary construction makes sense – and if it needs to. (Group E)</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr P Mackay			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Mackay			

EN4312 Authorising English: Society, Gender and Religion in Late Mediaeval English Literature				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm and 4.00 pm Mon			
<p>The module examines the literature composed in England during the later Middle Ages with an emphasis on the years around 1400 - a period in which ideas of 'English literature' and the 'English language' can be seen under construction. The module offers an introduction to the genres of Middle English literature (particularly lyric poetry, romance and mystical writing). And it examines the interrelationship between textual practice and the cultural processes that generated imaginative writing. Special attention will be paid to the preoccupation of authors with a world which they saw as moving towards moral, political and religious complexity and uncertainty. Also to be explored will be the implication in turbulent ideological debate of the use of English in texts many of which are written for laypeople and women (Group A)</p>				
<b>Programme module type:</b>	Group A Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr I R Johnson			
<b>Lecturer(s)/Tutor(s):</b>	Dr I R Johnson			

EN4316 Courtly Literature in Middle English				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Tue and 12.00 noon Thu			
This module explores the idea of 'courtly literature' through detailed study of some of the most influential poems in Middle English. Alongside Chaucer's Troilus and Criseyde, students might read works such as Gower's Confessio Amantis, Sir Gawain and the Green Knight or The Floure and the Leafe. The aim of the module is to study fewer, larger texts in greater depth, allowing students to get to grips with the depth and complexity of these canonical works and the literary-critical issues they raise. A central critical issue to be explored is the heated modern debate over the notion of 'courtly love'. (Group A)				
<b>Programme module type:</b>	Group A Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004 (for St Andrews students - may be waived for JSA students).			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr M R Purdie			
<b>Lecturer(s)/Tutor(s):</b>	Dr M R Purdie			

EN4344 Early English Romance Comedy: Shakespeare and his Contemporaries				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm Mon and 11.00 am Wed			
Students will consider the dramatic rendering of romance material in the late sixteenth and early seventeenth centuries alongside contemporary writing on dramatic theory and information about staging alongside contemporary poetry and prose fiction. About half the texts studied will be by Shakespeare. (Group B)				
<b>Programme module type:</b>	Group B Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar/tutorial and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A L Davis			
<b>Lecturer(s)/Tutor(s):</b>	Dr A L Davis			

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EN4345 Hard Cases: Literary Complexity from Donne to Pope				
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Planned timetable:	2.00 pm - 4.00 pm Mon			
<p>During the English Renaissance it was widely understood that literature ought to 'instruct by pleasing'. This module is concerned with those writers and texts that seem to ignore this imperative. Why, we will ask, do writers from John Donne to Alexander Pope go out of their way to challenge or baffle or confuse or overwhelm their readers? What are the forms, conditions, and uses of literary complexity? This module might alternatively be called 'How To Read Hard Renaissance Texts.' Likely authors studied will include Donne, Marvell, Cavendish, Milton, Dryden, Swift, Pope. (Group B)</p>				
Programme module type:	Group B Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching methods and delivery:	Weekly contact: 1 x 2-hour seminar, and 2 optional consultative hours.			
	Scheduled learning: 44 hours		Guided independent study: 256 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
Module Co-ordinator:	Dr M C Augustine			
Lecturer(s)/Tutor(s):	Dr M C Augustine			

EN4346 The Early Tudors: Literature and Reformation				
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Planned timetable:	10.00 am Tue and Thu			
<p>This module explores poetry, prose and drama from the reign of Henry VIII through to the early years of Elizabeth I's rule. It will examine the remodelling of literary forms in a period of religious and political 'reformation', combining broad cultural and historical perspectives with in-depth textual analysis. Key texts include: More's Utopia; the poetry of Wyatt, Surrey and Skelton; early sixteenth-century religious verse; and the allegorical drama Everyman. Students will have the opportunity to write on the reception of this period in film, novels, the visual arts, etc. (Group B)</p>				
Programme module type:	Group B Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching methods and delivery:	Weekly contact: 2 x 1-hour seminars, and 2 optional consultative hours.			
	Scheduled learning: 44 hours		Guided independent study: 256 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
Module Co-ordinator:	Dr A L Davis			
Lecturer(s)/Tutor(s):	Dr A L Davis			

EN4347 Milton				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon			
This module covers the writings of John Milton, in verse and in prose, from the beginning of his career to the end and across the tumultuous decades of the seventeenth century through which Milton lived. In every instance we will try and combine faithful attention to the text with a keen awareness of how Milton's contexts - literary, historical, and otherwise - shaped and were shaped by Milton's work. Students should be prepared for an intense programme of primary and secondary reading and for heavily discussion-based seminars. Assessment will be by a progression of essays; there is no exam. (Group B)				
<b>Programme module type:</b>	Group B Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Augustine			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Augustine			

EN4361 The Novels of Jane Austen in Context				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am - 12.00 noon Mon			
This module will examine the six major novels of Jane Austen in the context of novels by three of her contemporaries, Mary Wollstonecraft, Maria Edgeworth and Ann Radcliffe. It aims to encourage an understanding of Austen's work in the light of Romantic period aesthetics and politics and to explore Austen's affinities with and departures from the novelistic conventions of the late eighteenth and early nineteenth centuries. The module will also consider critical and theoretical approaches to Austen's writing and selected contemporary translations of Austen's work through recent screen adaptations of her novels. (Group C)				
<b>Programme module type:</b>	Group C Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr K Garner			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Garner			

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EN4362 Mind, Body and Soul: Literature in the Enlightenment				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm Tue and 2.00 pm Thu			
<p>The Enlightenment is a contested historical category, with arguments about literature and philosophy contributing to the definition of what enlightens a human subject. As a result of reading major texts of poetry, fiction and non-fiction from the Eighteenth Century, students on this module will be encouraged to explore the ways in which literature constructs relationships between the rational, emotional, spiritual and physical aspects of human life. They will also be invited to ask how the physical, emotional and spiritual impinge upon rational accounts of enlightenment, and will study the way in which literary texts such as Rochester's poems, Pope's Essay on Man, and Sterne's Tristram Shandy complicate accounts of the age of reason given from the perspective of the history of ideas. (Group C)</p>				
<b>Programme module type:</b>	Group C Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr W Oakley			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Oakley			

EN4363 Romantic Writing and Women				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm Tue and 10.00 am Fri			
<p>The work of Blake, Wordsworth and Shelley is well known to students of Romanticism - but what of their female contemporaries? This module explores the richly varied and often exciting fiction, poetry and non-fictional prose emanating from the pen of women writers in the aftermath of the French Revolution, showing how a 'revolution in female manners' sprang out of the momentous changes of post-1789 European society. (Group C)</p>				
<b>Programme module type:</b>	Group C Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture/seminar and 1 tutorial/seminar and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 50%, Written Examination = 50%			
<b>Module Co-ordinator:</b>	Dr K Garner			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Garner			

EN4364 The Art of Victorian Poetry				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri			
<p>This module explores the richness and diversity of poetry written and/or published in the period 1837-1901. Covering a range of major works, it examines the new demands made of poetry in this era, and the different ways in which poets respond to the challenge of skepticism and disagreement about poetry's place in an industrialised society. The structure of the module is both chronological and thematic, addressing issues such as gender, class, religion, and nation in relation to Victorian poetry. Throughout, the module uses the background of visual art - including poetry book illustration, Victorian paintings based on subjects from Victorian poetry, and artworks commemorated in Victorian poems - to highlight issues regarding poetry's status, aims, and appearance in the period. Looking at the art of poetry in relation to visual art, it asks how Victorian poetry aligns itself with broader aesthetic debates about form, function, and representation. (Group C)</p>				
<b>Programme module type:</b>	Group C Optional for English and BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr C Gill			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Gill			

EN4366 Byron's Long Poems and Dramas				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am - 12.00 noon Mon			
<p>This module provides an opportunity to study the poetry of Lord Byron in depth and to explore what made him one of the most controversial writers of his time. Particular attention will be devoted to Byron's verse craftsmanship and students will learn about the peculiar challenges and rewards of editing a Romantic poet who placed a great deal of emphasis on the way that the reader co-produces poetic meaning. (Group C)</p>				
<b>Programme module type:</b>	Group C Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004, EN3163			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr B Hewitt			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Hewitt			

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EN4399 Dissertation in English				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Fri			
<p>This module provides an opportunity to undertake a sustained piece of independent work, on a topic chosen by the student in consultation with a member of the School, leading to the presentation of an essay not more than 10,000 words in length. The dissertation may consist of a critical discussion or of a project based on the extensive collection of electronic texts currently available to the School. It will involve personal reading and research and will develop a range of skills, including investigative reading, use of information technology, the exploitation of library and internet resources, and the organisation and presentation of evidence and argument. Guidance will be given on scholarly conventions and basic research methods. (Group D)(Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for Single Honours English and BA (Intl Hons) English. Optional for Joint Honours English			
<b>Pre-requisite(s):</b>	A pass in any 3000-level English module.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 hours per semester + 1 consultation hour weekly.			
	<b>Scheduled learning:</b> 17 hours		<b>Guided independent study:</b> 283 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr P Mackay			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

EN4404 Shakespeare and Film				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm - 4.00 pm Tue, plus film viewing (from 2.00 pm Fri).			
<p>A study of filmed versions of Shakespeare's plays (including adaptations) from the silent era to the present, including an introductory exploration of film history, theory and practice. There will be a film viewing each week and students will have the opportunity to map out a design for filming a scene from one of the plays as part of their assessment. (Group E)</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture plus 1 film viewing session, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 66 hours		<b>Guided independent study:</b> 234 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr A Shinn			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Shinn			



EN4405 Contemporary Poetry in Great Britain and Ireland				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Tue.			
This module provides an introduction to contemporary English-language poetry written in Great Britain and Ireland; examines some of its important forebears; and gives an overview of the present state of the art in the constituent nations of the United Kingdom and in the Republic of Ireland.(Group E)				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof D Paterson			
<b>Lecturer(s)/Tutor(s):</b>	Prof D Paterson			

EN4406 Contemporary British Fiction				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 12.00 noon Mon and Thu			
This module is designed to explore the range and diversity of British fiction of the last two decades, including examples of the short story, and to meet the challenge of entering into debate in areas where there is no body of settled opinion. Texts selected will vary from year to year. Students will typically examine from seven to nine works, looking at both thematic and formal issues. (Group E)				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x lecture and 1 seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J Byatt			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Byatt			

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EN4409 Modern American Drama				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Tue and 12.00 noon Thu			
This module aims to introduce students to recent and contemporary American plays and to issues involved in the study of drama of any period. It is offered as a complement to EN3065 in which plays from the early and middle years of the twentieth century are studied. (Group E)				
<b>Programme module type:</b>	Group E Optional for English, section I for BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar, and 2 optional consultative hours			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr P H Parry			
<b>Lecturer(s)/Tutor(s):</b>	Dr P H Parry			

EN4414 Thomas Hardy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am Tue and 10.00 am Thu			
This module is based on the close study of a selection of the prose fiction, poetry and autobiographical writings of Thomas Hardy. Students will examine Hardy's position as a regional writer, his relation to 'realism', and his representation of women and sexuality; the features, thematic and formal, which have made him a major influence on twentieth-century poetry; and the relevance of (auto)biographical and historical questions to the study of his work. The module will introduce students to a range of issues in social, literary and intellectual history, and to the use and evaluation of some recent developments in critical theory. (Group E)				
<b>Programme module type:</b>	Group E Optional for English, section II for BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture(x 11 weeks), 1 fortnightly seminar and 1 fortnightly tutorial, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Mr P V Mallett			
<b>Lecturer(s)/Tutor(s):</b>	Mr P V Mallett			

EN4415 T.S. Eliot				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed			
The module aims to familiarise students with the Complete Poems of T.S. Eliot, and with some of his drama and criticism. Building on the study of poetry at sub-honours level, this module is freestanding, though it contributes to the study of poetry and Modernist writing at Honours level. (Group E)				
<b>Programme module type:</b>	Group E Optional for English, section II for BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof R Crawford			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Crawford			

EN4416 Virginia Woolf				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Thu			
The writings of Virginia Woolf have had a major impact on the development of the English novel this century. This module involves detailed study of Woolf's most important fictional texts, and also considers her contribution to literary criticism and feminism through readings of selected extracts from her essays and diaries. The development of critical and communication skills through written and oral assignments will be an integral part of the module. (Group E)				
<b>Programme module type:</b>	Group E Optional for English, section II for BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar/tutorial, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr E Sutton			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Sutton			

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EN4417 Creative Writing 1				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am – 1.00 pm Wed Lecture: 11.00 am – 12pm Wed. Workshop sessions: 10.00 am – 11.00 am Wed and 12.00pm – 1pm Wed. Students will attend 1 workshop session for half the semester and then the other workshop session, so need to be available 10.00 am – 1.00 pm throughout the semester.			
EN4417 offers instruction in creative writing through both reading and composition. Students will learn to analyse the effectiveness of literary forms critically, and assessment will include submissions of original creative work. (Group E)				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004		<b>Anti-requisite(s):</b>	EN4420
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 seminar and 1 tutorial, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Ms R Thomas and Mr O Emanuel			
<b>Lecturer(s)/Tutor(s):</b>	Ms R Thomas and Mr O Emanuel			

EN4419 American Fiction: Self and Nation (1865 - 1939)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm and 3.00 pm Fri			
This module provides an introduction to American fiction published between the end of the Civil War and the start of the Second World War. The module encourages students to evaluate the relationship between historical events (including Reconstruction, the 'Jazz Age', the Depression) and American literary movements and genres including the romance, the realist novel, the 'lost generation', the Harlem Renaissance and Southern Gothic. The module is centrally concerned with the conception and representation of American identity in fiction, and with heterogeneous definitions of 'the American novel'. These topics are considered in relation to the historical, social and geographical contexts of ten set texts. (Group E)				
<b>Programme module type:</b>	Group E Optional for English, section I for BA (Intl Hons) English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 seminar and 1 tutorial, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J D Byatt			
<b>Lecturer(s)/Tutor(s):</b>	Dr J D Byatt			

EN4420 Creative Writing 2				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am - 1.00 pm Wed Lecture: 11.00 am - 12 noon Wed. Workshop sessions: 10.00 am - 11.00 am Wed and 12.00 noon - 1.00 pm Wed. Students will attend 1 workshop session for half the semester and then the other workshop session, so need to be available 10.00 am - 1.00 pm throughout the semester.			
EN4420 offers instruction in creative writing through both reading and composition. Students will learn to analyse the effectiveness of literary forms critically, and assessment will include submissions of original creative work. (Group E)				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004	<b>Anti-requisite(s):</b>	EN4417	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 seminar and 1 workshop, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Ms L G Glaister and Mr J B Polley			
<b>Lecturer(s)/Tutor(s):</b>	Ms L G Glaister and Mr J B Polley			

EN4422 Poetic Language				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue, 12 noon Thu			
This module focuses on the history of thinking about poetic language, primarily in English-language traditions. Its core will be the study of twentieth- and twenty first-century theories of poetic language, but it will draw on theoretical and literary texts from the fourteenth century onwards. Poetic language is a contested topic in various established and emerging disciplines: literary linguistics, post-structuralist theory, philosophy of language, cognitive poetics, practice-led research. This module will draw together the study of poetic language from these various perspectives, and enable students to apply their theoretical studies to a wide range of poetic texts, and to appreciate how those texts complicate theoretical work. The module will help to bridge the gaps between different ways of studying poetry in the university context – theoretical, scholarly, creative. (Group E)				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, 1 x 1 hour seminar and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 50 hours		<b>Guided independent study:</b> 250 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr W Oakley			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Oakley			

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EN4423 Material Culture in Victorian and Modernist Fiction				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 - 5.00 pm Thu			
<p>This module will use material culture studies as a lens through which to consider the continuities and ruptures between Victorian and modernist attitudes towards material culture and the ways in which attitudes towards the material informed the stylistic choices of fiction writers in these periods. Victorian novelists typically filled their works with detailed descriptions of physical environments and objects in order to create the 'solidity of specification' characteristic of realist fiction; modernist writers rejected this method as 'materialist' and sought alternatives to the solidity of the triple-decker novels of the Victorians. However, this module will question such easy distinctions and consider both differences and continuities between Victorian and modernist writers' fascination with and suspicion of things. Authors studied may include Elizabeth Gaskell, Charles Dickens, Arthur Conan Doyle, E M Forster, and Virginia Woolf. (Group E)</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr C M Alt			
<b>Lecturer(s)/Tutor(s):</b>	Dr C M Alt			

EN4424 Nationalists and Nomads: Contemporary World Literature				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Thu			
<p>In an era of globalisation who 'speaks' the nation-state? How do communities negotiate their borders? Who 'belongs' and who decides? This module explores the changing nature of the nation-state and cultural expressions of belonging in the wake of decolonisation, independence, revolution and globalisation. Exploring a diverse range of texts drawn from across the globe, we will question the significance of 'world literature' and its relation to postcolonialism, 'cosmopolitanism' and national literatures. From the Haitian Revolution, independence movements, the Biafran war, Trujillo's Dominican dictatorship and the 'parsley massacre' to tourism and globalisation, this course is an opportunity to reflect on the pressures facing our global imagined communities in the late twentieth and twenty-first centuries.</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr L M Burns			
<b>Lecturer(s)/Tutor(s):</b>	Dr L M Burns			

EN4425 Celtic Modernisms				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Tue and 11.00 am Thu			
<p>How exclusive a club is modernism? Did Scottish and Irish cultural nationalism inform and trouble 'modernist' writing? And what role did writers from the 'Celtic fringe' of the British archipelago play in reinvigorating and reconfiguring the literary canon in the period between 1914 and 1939? By analysing a diverse range of texts from Scottish, Irish and (Anglo-)Welsh writers – from formal as well as socio-political perspectives – we will explore alternative views of the Modernist period: in particular we will examine the relationship between the Irish Literary Revival and the Scottish Renaissance, and between the Celtic periphery and the metropolitan centre, and also the ways the writers studied turned the English language, and its hierarchies and traditions, back on itself. (Group E)</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour seminars and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr P MacKay			
<b>Lecturer(s)/Tutor(s):</b>	Dr P MacKay			

EN4426 Civil Wars on Page and Screen				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Mon			
<p>In this module we shall be looking at literary and cinematic representations of different instances of civil war and partition – the Irish Civil War (1922-1923), the Spanish Civil War (1936-1939), the conflict around the Indian/Pakistani partition (1947), the conflict between Israel and Palestine (1948-present), the Nigerian Civil War/Biafran War (1967-1970) and the Sri Lankan Civil War (1983-2009). In the process, we will focus on issues such as gender, nationhood, politics of memory and commemoration, and the aesthetics of representing violence. We will examine the politics of definition of civil wars and think about civil wars as a consequence of colonialism and post-colonial nation-building. What are the specific issues that are associated with civil war? Is there a particular kind of literature that comes out of civil wars? What role does literature play in our perceptions of civil war? How might it help or hinder post-civil war reconciliation?</p>				
<b>Programme module type:</b>	Group E Optional for English			
<b>Pre-requisite(s):</b>	EN2003, EN2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar and 2 optional consultative hours.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Raychaudhuri			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Raychaudhuri			

English - Honours Level - 2014/15 - August 2014

EN4427 The Shape of the Poem			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Tue		
<p>Why is iambic pentameter still so popular? Why are sonnets the shape they are? What makes poetry memorable? What do we mean by a poem's 'music'? This module will explain what makes poetic speech and form distinct, and examine the relationship between the forms we read on the page, and the real forces that shape the poem. The module will focus on examples from Anglo-Saxon poetry to the present day, and will draw on both traditional methods of analysis and recent linguistic theory to explain how the poem works.</p>			
<b>Programme module type:</b>	Group E Optional for English		
<b>Pre-requisite(s):</b>	EN2003, EN2004		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar and 2 optional consultative hours.		
	<b>Scheduled learning:</b> 44 hours	<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Prof D Paterson		
<b>Lecturer(s)/Tutor(s):</b>	Prof D Paterson		



## School of Geography &amp; Geosciences

## Environmental Geography (EG) modules

EG3020 Global Climate Change				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 10.00 am Wed and Thu, 2.00 pm - 5.00 pm Tue			
Climate change is one of the most challenging environmental problems currently facing society. Recent global warming likely lies outside the range of natural variability when compared to the last 1000 or even 2000 years. This module addresses how this consensus view has been derived and considers the scientific evidence and arguments that underpin our current understanding of climate change. The module examines both strengths and limitations of long-term proxy climate records, historical datasets based upon direct observation, models of the climate system, and areas of greatest uncertainty within current knowledge. The impacts and policy responses to climate change are also introduced.				
<b>Programme module type:</b>	Compulsory for MGeol Earth Sciences and BSc Environmental Earth Sciences. Optional for Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Normally ES2002 or ES2003 or (GG2011 and GG2012)			
<b>Anti-requisite(s):</b>	GG3265, GG3268			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures and 1 x 2-hour practical.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 106 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Wilson			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Wilson, Dr T Hill, Dr T Raub			

EG3021 Contemporary Environmental Problems: Applications and Solutions				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed			
Environmental problems abound on local, regional, and global scales. The ability of current and future generations to understand, predict, and ameliorate these problems requires a solid understanding of links between their causes, processes, and environmental symptoms under various forcing conditions. This course considers several case studies of important terrestrial, marine, and atmospheric environmental problems, allowing students to evaluate the scientific evidence and challenging them to understand the physical, biological, and chemical processes that underpin their expression. The assessment will mimic the types of analysis/report used in industrial settings to describe, report and advise regarding environmental problems.				
<b>Programme module type:</b>	Compulsory for MGeol Earth Sciences and BSc Environmental Earth Sciences. Optional for Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Normally ES2002 or ES2003 or (GG2011 and GG2012)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures (x 11 weeks), 3 x 3-hour practical sessions and 6 tutorials over the semester.			
	<b>Scheduled learning:</b> 37 hours		<b>Guided independent study:</b> 154 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr M Singer			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Singer, Dr H Burdett, Dr T Hill			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

EG3031 Special Topic for Physical Geography				
<b>SCOTCAT Credits:</b>	5	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to Geography students			
<b>Planned timetable:</b>	To be arranged.			
This module provides support and guidance for geography students taking one of the Earth & Environmental Science modules offered as part of the Geography degree (normally ES3020-ES3030). In addition Geography MA and BSc students taking 15-credit modules from the Science Faculty may find themselves 5 credits short and this module provides the necessary credit top-up.				
<b>Programme module type:</b>	Optional for Geography or Sustainable Development students also taking one of EG3020 - EG3030			
<b>Pre-requisite(s):</b>	GG2011 and GG2012	<b>Co-requisite(s):</b>	One from EG3020 - EG3030	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Occasional tutorials.			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 42 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr T Hill			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

EG3032 Special Environmental Topic for Physical Geography				
<b>SCOTCAT Credits:</b>	5	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Only available to students on a Geography or Sustainable Development Honours programme			
<b>Planned timetable:</b>	To be arranged.			
This module provides support and guidance for geography students taking one of the Earth & Environmental Science modules offered as part of the Geography degree (normally EG3020-EG3030). In addition Geography MA and BSc students taking 15-credit modules from the Science Faculty may find themselves 5 credits short and this module provides the necessary credit top-up. The present module is designed to pair with environmental science-based modules such as EG3021 Contemporary Environmental Problems: Applications and Solutions.				
<b>Programme module type:</b>	Optional for Geography or Sustainable Development students also taking one of EG3020 - EG3030			
<b>Co-requisite(s):</b>	Normally one from EG3020 - EG3030- currently EG3021			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hours of tutorials (x 4 weeks)			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 42 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Singer			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

<b>EG4020 Geochronology</b>			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon, 2.00 pm - 5.00 pm Mon		
<p>Determining the chronological age of events is one of the most fundamental questions in Earth and Environmental Sciences. However this simple question presents extraordinary challenges and interpreting age data is complex. Different methods are used for historical, Quaternary and geological timescales, each of which has its own strengths and drawbacks. Dating is achieved using methods that vary from measuring lichens with a ruler to detecting attogram levels of isotopes using some of the most precise instrumentation in physical science. We will explore a variety of simple and complex tools to understand the time frames of Earth processes such as erosion rates, sequences of moraine deposition, and successions of volcanic eruptions. Understanding how processes are dated in many cases requires the analyst to understand more fully the process itself. This module will be of interest to anyone involved in understanding processes across historical and Quaternary timeframes to those in Deep Time.</p>			
<b>Programme module type:</b>	Optional for all Earth & Environmental Science BSc and M.Geol .degrees and Geography or Sustainable Development M.A. and BSc		
<b>Pre-requisite(s):</b>	Normally ES2002 or ES2003 or (GG2011 and GG2012)		
<b>Anti-requisite(s):</b>	GG3269		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures (x 11 weeks), 3 x 2-hour practical sessions, 2 x 1-hour mentoring for orals over the semester.		
	<b>Scheduled learning:</b> 30 hours	<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Practical Report = 30%, Oral Presentation = 20%		
<b>Module Co-ordinator:</b>	Dr V Rinterknecht		
<b>Lecturer(s)/Tutor(s):</b>	Dr V Rinterknecht, Dr R Wilson, Dr T Raub, Dr A Burke, Dr R Robinson		

## Geography & Geosciences - Honours Level 2014/15 - August 2014

EG4031 Analytical Sciences for Physical Geography				
<b>SCOTCAT Credits:</b>	5	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students on a Geography Honours programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>The module comprises a series of seven lectures about analytical science. The lectures explain the basic principles of accuracy and precision and these are illustrated in the context of four of the most common analytical methods used in physical geoscience. This module provides analytical science skills training to support students taking one of the Year 4 Earth &amp; Environmental Science modules offered as part of the Geography degree (EG4020-EG4030). Students are asked to research an analytical method that complements teaching in the associated EG402X module. This is then presented in a poster format imitating the poster sessions at major conferences. Posters are marked by both students (peer assessment) and staff, and any discrepancies between those marks are discussed. The module will give BSc Geography students the necessary training in analytical science to allow them to excel in the accompanying EG402X module.</p>				
<b>Programme module type:</b>	Optional for Geography or Sustainable Development students also taking one of EG4020 - EG4030.			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012			
<b>Co-requisite(s):</b>	One of EG4020 - EG4030			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 7 x 1-hour lectures and 1 x 8-hour poster presentation day over the semester.			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 35 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework (Poster session) = 100%			
<b>Module Co-ordinator:</b>	Dr A Finch			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Earth Sciences (ES) modules

ES3001 Geological Mapping				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides training in independently constructing and interpreting geological maps and cross sections. It develops the student's abilities to recognise structures in both two and three dimensions and, by inferring how these structures have changed with time, to develop four-dimensional intellectual skills. The module provides training in defining geological sampling strategies and field report writing.</p>				
<b>Programme module type:</b>	Compulsory for BSc Geology, joint degrees with Biology and Chemistry, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES2001 and ES2002	<b>Required for:</b>	ES3006, ES3010	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 4 map and cross-section practicals (3 hours each) and lectures over 11 weeks and occasional 2-hour fieldwork tutorials.			
	<b>Scheduled learning:</b> 19 hours		<b>Guided independent study:</b> 131 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr T Prave			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Prave			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES3002 Analytical and Statistical Methods in Earth Sciences				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon (analytical methods), 2.00 pm - 4.00 pm Thu (stats)			
<p>This module covers the principles behind, and practical application of, analytical science and data handling in Earth Sciences. Four key analytical methods are presented and students operate instruments under technical supervision. Statistical training includes (i) understanding data types, (ii) data presentation and basic descriptive statistics, (iii) probability, (iv) hypothesis testing using parametric statistics, (v) correlation and regression, (vi) introduction to numerical methods. Each student will have an opportunity to research an unusual analytical method, relevant to their own interests. Skills taught here reinforce Earth Sciences honours teaching, particularly the independent research project module.</p>				
<b>Programme module type:</b>	Compulsory for BSc Geology, Environmental Earth Science, joint degrees with Biology and Chemistry, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES2001 and (ES2002 or ES2003)	<b>Required for:</b>	ES3003, ES3008	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, practicals, tutorials and lab time averaging 5 hours per week.			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 95 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Finch			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Finch, Dr R Wilson			

ES3003 GIS and Spatial Analysis for Earth Scientists				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am - 1.00 pm Mon, Wed (lecture plus lab session) (Weeks 1 - 6)			
<p>This module covers the principles behind, and practical application of, spatial analysis in Earth Sciences. This includes the analysis of primary and secondary datasets, how to access and import a variety of data types, and the fundamentals of various spatial analytical methods including spatial statistics and modeling within a GIS environment. The module also prepares students for the correct presentation of maps and datasets in the dissertation proposal and thesis.</p>				
<b>Programme module type:</b>	Compulsory for BSc Geology and Environmental Earth Science, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 5 lectures and 12 practicals and support sessions (Weeks 1-6).			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 102 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Robinson			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Robinson			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES3004 Processes and Products in Sedimentary Systems				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am - 1.00 pm Mon and Wed (lectures), 2.00 - 5.00 pm Fri (practicals). 3 field days (9.00 am - 5.00 pm)			
This core module provides fundamental knowledge and training in describing, studying and interpreting sediments, sedimentary rocks and stratigraphic frameworks. The concepts and methodologies of process sedimentology, stratigraphy and sedimentary petrography will be taught, and training undertaken using fieldwork and practicals. The module serves as preparation for subsequent modules on related topics and for field-based modules, including Advanced Geological Mapping, the Research dissertation, and the fourth-year field course.				
<b>Programme module type:</b>	Compulsory for BSc Geology, Environmental Earth Science, joint degrees with Biology and Chemistry, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES2001 and (ES2002 or ES2003)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly lectures and practicals averaging 3 hours per week plus field training			
	<b>Scheduled learning:</b> 54 hours		<b>Guided independent study:</b> 96 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr T Prave			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Prave, Dr M Singer, Dr R Robinson, Mr S Allison			

ES3006 Advanced Geological Mapping				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Not available to General Degree students.			
<b>Planned timetable:</b>	9.00 am - 5.00 pm Fri (map practicals)			
Geological maps are not just summaries of rocks - they are ways of conveying three-dimensional structure and geological history. This module starts with lab-based analysis of classic geology maps and field-based skills training sessions, followed by two one-week field courses. Field assessment comprises field notes and geological maps within holistic, problem-based exercises, determining the geology of these areas from first principles. At the end of the module, students will not only have learned how to record, interpret and present field data, but also to visualise geology in four dimensions. This module is one of the most important for developing confidence in field techniques prior to independent research projects.				
<b>Programme module type:</b>	Compulsory for BSc Geology, joint degrees with Biology and Chemistry, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	ES3001	<b>Required for:</b>	ES4001	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 8 practical sessions through semester plus residential field class.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 62 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Finch			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES3007 Structural Geology and Tectonics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Tue and Thu (lectures), 2.00 - 5.00 pm (practicals)			
This module covers the principles of rock deformation and associated metamorphism, and the tectonic processes that drive this deformation. The goals of this course are: a) the development of skills in the structural analysis of rock bodies to gain an understanding of the geometries, sequencing, and kinematics of deformational features; b) understanding of tectonic principles and controls on rock deformation and mountain building.				
<b>Programme module type:</b>	Compulsory for BSc Geology and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES2001 and ES2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 11 weeks), 7 x 3-hour practicals during the semester and fieldwork			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 95 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof P Cawood			
<b>Lecturer(s)/Tutor(s):</b>	Prof P Cawood			

ES3008 Geochemistry				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Tue and Thu (lectures), 2.00 - 5.00 Thu (practicals)			
This module focuses on the application of chemical principles to the Earth sciences, and the development of these principles as valuable tools available to the modern Earth scientist. The course aims to develop a comprehensive understanding of: (1) the origin and distribution of chemical elements in the Earth and solar system, (2) the major chemical reactions that take place on the surface of the Earth and its interior, and (3) how matter is cycled between the Earth's major chemical reservoirs. These concepts are developed through the application of thermodynamics to natural systems and the use of radiogenic and stable isotopes, based on theoretical and practical discussions. These tools are used in the module to allow quantitative predictions regarding the outcome of chemical reactions associated with geological processes.				
<b>Programme module type:</b>	Compulsory for BSc Environmental Earth Science, MGeol Earth Sciences, BSc Geology and joint degrees with Biology and Chemistry			
<b>Pre-requisite(s):</b>	Normally ES3002, ES3005			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 17 lectures, 15 hours of laboratory classes, 2 or more field classes over the semester.			
	<b>Scheduled learning:</b> 54 hours		<b>Guided independent study:</b> 96 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr N Allison			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES3009 Igneous and Metamorphic Petrology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 5.00 pm Mon (practicals), 9.00 am Tue and Thu (lectures)			
This is a core module in Geology delivered early in the honours programme providing a framework for interpreting major petrological processes acting within the Earth's crust and mantle. The module serves as preparation for subsequent modules on related topics and for field-based modules, including Advanced Geological Mapping, the Research dissertation, and the Alps field course.				
<b>Programme module type:</b>	Compulsory for BSc Geology, joint degrees with Biology and Chemistry, and MGeol Earth Sciences; optional for BSc Environmental Earth Science			
<b>Pre-requisite(s):</b>	Normally ES2001 and (ES2002 or ES2003)	<b>Required for:</b>	ES4006	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures (x 11 weeks), 3-hour practicals most weeks.			
	<b>Scheduled learning:</b> 50 hours		<b>Guided independent study:</b> 100 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 50%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, 2 x 2-hour Practical Examination = 50%			
<b>Module Co-ordinator:</b>	Dr C Donaldson			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Donaldson, Dr A Finch			

ES3010 Advanced Environmental Field Methods				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 5.00 pm Fri (Weeks 1 - 4)			
This forms the introduction to methodologies and training in applied environmental problems. This module starts with field-based skills training sessions. Specific environmental problems will be identified, and researched in detail before a one-week field excursion where an environmental impact problem will be addressed in the field using geological and geophysical mapping, and analysis of surface and sub-surface hydrology.				
<b>Programme module type:</b>	Compulsory for BSc Environmental Earth Science			
<b>Pre-requisite(s):</b>	ES3001	<b>Required for:</b>	ES4008	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 8 field-based skills training sessions, fortnightly seminar, one 1-week field excursion, and 1-week of lab-based data analysis .			
	<b>Scheduled learning:</b> 53 hours		<b>Guided independent study:</b> 97 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Wilson			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			



## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES3011 Global Biogeochemical Cycles				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>Environmental Earth Science is inherently multi-disciplinary, but many environmental science courses focus on specific reservoirs of the Earth system (e.g., the atmosphere, oceans, or continental crust), rather than examining the system as a whole. The study of global biogeochemical cycling crosses these disciplinary boundaries, following specific elements as they are cycled through the Earth surface by physical, chemical, and biological transformations. This module will focus on the cycling of five elements critical to life on Earth - Carbon, Oxygen, Sulfur, Phosphorus, and Nitrogen – using examples from both modern and ancient environments, and their response to human influence. An emphasis will be placed on understanding proxies utilized for unravelling these processes in the environment and in the rock record, along with modern quantitative methods used to constrain these cycles.</p>				
<b>Programme module type:</b>	Compulsory for Environmental Earth Sciences and MGeol Earth Sciences Optional for Geology, Biology and Geology, Chemistry and Geology			
<b>Pre-requisite(s):</b>	Normally ES2002 or ES2003, and ES3008			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures and 2-hour practical sessions (x 8 weeks).			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Zerkle			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Zerkle, Dr M Claire			

ES3099 Field Methods in Geosciences				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to visiting students.			
<b>Planned timetable:</b>	none - field-based module.			
<p>This module is designed exclusively for non-graduating overseas undergraduate students seeking advanced training in geological field methods. It consists of hands-on experience honing observational and mapping skills by participating in highly focused residential and one-day excursions and associated laboratory classes. The module takes full advantage of the University's location close to some classic geological locations, normally including the central Spain Sierra Norte region, the Moine thrust system, the Buchan and Barrovian metamorphic zones, the Girvan-Ballantrae ophiolite and the Hebridean plutonic and volcanic centres.</p>				
<b>Programme module type:</b>	Available to visiting students only.			
<b>Pre-requisite(s):</b>	Must be studying Earth Science at an overseas university			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Occasional lectures, tutorials and practicals in addition to fieldwork - this is predominantly a residential field-based module.			
	<b>Scheduled learning:</b> 268 hours		<b>Guided independent study:</b> 32 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>odule Co-ordinator:</b>	Dr R Robinson			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES4001 Field Excursion and Map Interpretation				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	12 days fieldwork in August - September. 9.00 am - 5.00 pm Fri (practicals)			
Building on the field training of JH, this module develops the field observation and interpretation skills of collecting, recording, interpreting and synthesising data in the field and from geological maps and cross-sections. The field course will be thematic and examine all aspects of a region using an integrated approach. Theme and location may vary but the excursion will generally be based within a well-exposed orogenic belt with the aim of traversing from the foreland to the interior. Fieldwork will be combined with the interpretation of a region as represented on a geological map. Students will also be trained in the advanced techniques of interpreting remotely sensed images of the Earth's surface and geological maps, and in the construction of cross-sections.				
<b>Programme module type:</b>	Compulsory for BSc Geology and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	normally ES3006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-week field course and 4 lab sessions.			
	<b>Scheduled learning:</b> 84 hours		<b>Guided independent study:</b> 66 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr T Prave			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

ES4002 Research Review, Essay and Seminar				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 & 2 (taught twice)
<b>Availability restrictions:</b>	BSc students may only take this module in semester 1, MGeol students can take this module in either semester.			
<b>Planned timetable:</b>	Not applicable.			
The student proposes an Earth Science topic, one that has not been directly covered in a module. They discuss the suitability of the topic with a lecturer who agrees to become adviser to the student. Student and adviser are required to meet 2 further times during the module. Literature and web-based research is conducted and the student writes a critical review of ca. 3,500 words. The same material is also presented in a 15 minute seminar to staff and classmates. Advice on critical writing and presenting talks is given a year before the start of the module, on entry to Junior Honours, for use throughout the Honours programme. The seminar is assessed by both lecturers and peers. The module is normally carried out in Semester 1 but a Semester 2 Research Review may be considered for MGeol students on a case by case basis.				
<b>Programme module type:</b>	Compulsory for BSc Geology and Environmental Earth Science, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Admission to an Honours Earth Sciences programme or Environmental Earth Science			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Occasional lecture and 3 meetings with adviser spread across the semester.			
	<b>Scheduled learning:</b> 10 hours		<b>Guided independent study:</b> 140 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%			
	<b>As used by St Andrews:</b> Practical Examination = 15%, Coursework = 85%			
<b>Module Co-ordinator:</b>	Dr C Donaldson			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES4003 Research Dissertation				
<b>SCOTCAT Credits:</b>	45	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to Single Honours Earth Science students			
<b>Planned timetable:</b>	Not applicable.			
<p>An individual research project which allows the student to pursue in depth a topic of personal interest. The student works largely independently of supervision and has the opportunity to demonstrate individuality, initiative and enterprise. Skills of planning and executing research are learnt, as well as the ability to work independently, and present the results orally and in dissertation form (up to 10,000 words).                      (Guidelines for printing and binding dissertations can be found at:  <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for BSc Geology and Environmental Earth Science			
<b>Pre-requisite(s):</b>	Admission to an Honours Earth Sciences programme or Environmental Earth Science			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Regular meetings with supervisor arranged as required.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 430 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	<b>As used by St Andrews:</b> Proposal = 5%, Oral presentation = 10%, Dissertation = 85%			
<b>Module Co-ordinator:</b>	Dr T D Raub and Dr T Hill			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

ES4006 Advanced Igneous Petrogenesis				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Mon and Wed (lectures). 10.00 - 1.00 pm Tue (practicals)			
<p>The Earth's crust is largely created by acid and basic magmatism and many of the planet's critical resources are formed from igneous processes. The module explores the nature of that magmatism, the petrography and geochemistry of the minerals and rocks created, and the petrogenesis and evolution of the magma. The petrological characteristics of the continental crust and of the upper mantle, the principal sources of acid and basic magmas, are examined in detail for the influence which these have on the magmas created by partial melting. The economic significance of alkaline rocks as the hosts for many of the world's critical metals is considered.</p>				
<b>Programme module type:</b>	Optional for BSc Geology, Environmental Earth Science, joint degrees with Biology and Chemistry, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES3009			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 18 lectures, 15 hours of laboratory work, 18 hours of field-related study over the semester.			
	<b>Scheduled learning:</b> 50 hours		<b>Guided independent study:</b> 100 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 50%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, 3-hour Practical Examination = 50%			
<b>Module Co-ordinator:</b>	Dr C Donaldson			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Donaldson, Dr A Finch			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES4007 Petroleum Exploration and Geophysics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu (lectures), 2.00 - 5.00 pm Thu (practicals)			
The fundamental concepts, techniques and practices of the hydrocarbon exploration industry are presented. Students will gain a thorough understanding of the geoscience of petroleum exploration, particularly using geophysical methods, and a working knowledge of modern concepts in oil and gas geology.				
<b>Programme module type:</b>	Optional for BSc Geology, Environmental Earth Science, joint degrees with Biology and Chemistry, and MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES2001 and (ES2002 or ES2003)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 17 lectures, 15 hours laboratory classes, field classes over the semester.			
	<b>Scheduled learning:</b> 38 hours		<b>Guided independent study:</b> 112 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Bates			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Bates			

ES4008 Environmental Excursion and Maps				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	12 days fieldwork in August - September. 9.00 am - 5.00 pm Fri (practicals)			
Building on the training elements of JH, this module is designed to further develop the mapping and geochemical analytical skills used to solve geo-environmental problems. The field course will be thematic and examine environmental and geological aspects of a region using an integrated approach. Theme and location may vary. Additional mapping exercises will include use of aerial photographs, thematic mapping and GIS, and application of applied geophysical surveying and key analytical techniques.				
<b>Programme module type:</b>	Compulsory for BSc Environmental Earth Science			
<b>Pre-requisite(s):</b>	ES3010			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-week field course and 4 lab sessions.			
	<b>Scheduled learning:</b> 84 hours		<b>Guided independent study:</b> 66 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Robinson			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES4010 Joint Honours Research Project				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	Not applicable.			
An individual research project allows the student to pursue in depth a topic of personal interest. The student works largely independently and has the opportunity to demonstrate individuality, initiative and enterprise. Projects will normally include an aspect of field and analytical science. Skills of planning and executing research are learned, as well as the ability to work independently, and present the results orally and in dissertation form (up to 7,000 words). (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a> )				
<b>Programme module type:</b>	EITHER (ES4010 and CH4448) OR ID4441 are compulsory for joint degrees with Chemistry			
<b>Pre-requisite(s):</b>	Admission to Joint Honours Geology and Chemistry			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Regular meetings with supervisor arranged as required.			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 280 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	<b>As used by St Andrews:</b> Proposal = 5%, Oral Presentation = 10%, Dissertation = 85%			
<b>Module Co-ordinator:</b>	Dr T Raub			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

ES4011 Work Placement in Earth Sciences				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Planned timetable:</b>	To be arranged.			
Practical experience of Earth Sciences is important to graduate job prospects and for students to understand the practical relevance of taught material course. This module is a platform for the students to obtain experience of the workplace through an 8-week industrial placement. The student finds their own work placement, some with the assistance of staff connections in industry and alumni. Work placements can be of a variety of forms, varying from office or lab-based work to engineering geology at sites in the UK to exploration geology across the world. The performance of the student in the workplace is assessed using similar criteria to those used when applying for Chartered (CGeol) status. The student reports on their activities during placement at the end of the placement period.				
<b>Programme module type:</b>	ES4011 or ES4012 is compulsory for MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES2001 and ES2002 and Entry to MGeol Earth Sciences.			
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
	<b>Weekly contact:</b> Meetings.			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Robinson			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

ES4012 Research Placement in Earth Sciences				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Planned timetable:</b>	To be arranged.			
<p>Practical experience of Earth Sciences is important to graduate job prospects and for students to understand the practical relevance of taught material in the course. The present module is a platform for the students to obtain experience of the working in an academic research team through a research placement. The student finds their own placement by negotiating with staff. The performance of the student in the workplace is assessed using similar criteria to those used when applying for Chartered (CGeol) status. The student reports on their activities during placement at the end of the placement period.</p>				
<b>Programme module type:</b>	ES4011 or ES4012 is compulsory for MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Normally ES2001 and ES2002 and Entry to MGeol Earth Sciences.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Meetings.			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 0 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Bates			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

ES5001 Expedition Field Course				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	Summer
<b>Planned timetable:</b>	To be arranged.			
<p>Fieldwork in Earth Sciences is key to graduate job prospects and is a platform for students to bring together the many aspects of Earth Sciences. The present module will involve the students not just in carrying out fieldwork, but also in the logistical and interpersonal sides of success fieldwork design. Students will identify a field area for study in consultation with a member of the teaching staff, which includes several aspects of Earth sciences, such as igneous, sedimentary, economic and environmental geology. The students will form a team and divide the responsibilities for fieldwork and logistics. The assessment will include a memoir that will summarise the geological history of the area, similar to that published by a Geological Survey or the exploration industry. Some student groups may choose to use this module to carry out ambitious fieldwork in a remote setting.</p>				
<b>Programme module type:</b>	Optional for MGeol in Earth Sciences			
<b>Pre-requisite(s):</b>	Entry to Year 5 of MGeol Earth Sciences			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 5 hours of orientation/tutorials over 2 weeks			
	<b>Scheduled learning:</b> 10 hours		<b>Guided independent study:</b> 140 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Finch			

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ES5003 Research Dissertation				
<b>SCOTCAT Credits:</b>	60	SCQF Level 11	<b>Semester:</b>	Whole Year
<p>An individual research project on a topic in geological sciences which allows the student to pursue in depth a topic of personal interest. The student works largely independently of supervision and has the opportunity to demonstrate individuality, initiative and enterprise. Skills of planning and executing research are learnt, as well as the ability to work independently, and present the results orally and in dissertation form (up to 7,000 words). The project report will be as a publication-ready article in the manner of the journal "Geology".</p>				
<b>Programme module type:</b>	Compulsory for MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Entry to Year 5 of MGeol Earth Sciences			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Regular meetings with supervisor arranged as required.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 570 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100% (Project proposal = 5%, Oral Presentation = 10%, Dissertation = 85%)			
<b>Module Co-ordinator:</b>	Dr T Raub and Dr T Hill			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

ES5004 Integrated Earth Sciences				
<b>SCOTCAT Credits:</b>	30	SCQF Level 11	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
<p>This module requires students to think of themselves as practitioners of a single integrated subject and thereby to bring together the various themes they have explored in the modules taken through their degree programme. It also promotes independent, critical thinking across the subject. It is assessed by reports on talks/key topics, attendance at a major international conference (EGU) and a single 4-hour exam, in which students are given many different forms of geological data (numerical, thin section, hand specimen, maps etc.) and asked to solve a complex geological problem. The module also acts as a platform through which we deliver employment skills and involves a mock job interview.</p>				
<b>Programme module type:</b>	Compulsory for MGeol Earth Sciences			
<b>Pre-requisite(s):</b>	Entry to Year 5 of MGeol Earth Sciences			
<b>Anti-requisite(s):</b>	ES4004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Tutorials, mock job interview, assistance in preparation of EGU spread throughout the year.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 270 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = %, Coursework = 50%			
	<b>As used by St Andrews:</b> 4-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Robinson			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

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ES5009 Geodynamics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 10.00 am Tue and Wed; 9.00 am - 5.00 pm Fri (Weeks 2,5,9)			
A study of the geodynamic evolution of Earth's crust since the Archaean, the evolution of convergent and divergent margins, and the relationships between tectonics, erosion and climate. hydrosphere. The module contrasts geodynamic evolution in the Archaean, Proterozoic, Palaeozoic, Mesozoic and Cenozoic using a number of case studies, including examples visited in the field. The module develops skills of geodynamic interpretation, field observation, use of numerical models, report writing and oral presentation.				
<b>Programme module type:</b>	Optional for MGeol Earth Sciences, BSc Geology, Environmental Earth Science, and joint degrees in Biology and Chemistry			
<b>Pre-requisite(s):</b>	Normally ES2001 and (ES2002 or ES2003)	<b>Anti-requisite(s):</b>	ES4009	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 1-hour lectures (x 11 weeks) , plus 2 extended laboratory classes, and 2 days in the field during the semester.			
	<b>Scheduled learning:</b> 50 hours		<b>Guided independent study:</b> 100 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof P Cawood			
<b>Lecturer(s)/Tutor(s):</b>	Earth and Environmental Sciences staff			

ES5010 Environmental Geochemistry				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Many of the environmental challenges facing society revolve around the cycling of natural materials between fluid and solid phases. Some of the most fundamental aspects of Earth System development are investigated through geochemical methodologies that characterise and interrogate processes operating at the interface between the solid Earth and the fluid Earth. Further, the processes that concentrate many natural resources are a result of fluid-solid interactions that can be studied using organic and aqueous geochemistry. This module focuses on training in the state-of-the art techniques and methodologies that are tools that can be applied widely to address questions about environmental changes and chemistry in sediments and natural waters and, as well as utilisation and exploitation of hydrocarbon resources and Earth System evolution through time.				
<b>Programme module type:</b>	Optional for MGeol Earth Sciences, BSc Geology, Environmental Earth Science, and joint degrees in Biology and Chemistry			
<b>Pre-requisite(s):</b>	ES3008			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour lecture (x 10 weeks) 5 x 3-hour practical sessions, 1 x 8-hour session of project presentations over the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr H Oduro			
<b>Lecturer(s)/Tutor(s):</b>	Dr H Oduro, Dr M Singer, Dr H Burdett			



## Geography (GG) modules

GG3226 Population Studies: Europe before 1914				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module introduces the inter-disciplinary field of population studies through the study of the demography of Western Europe between c.1680 and c.1914. It focuses on the major transformations in mortality and fertility that fundamentally changed the demographic dynamics of European populations. Basic demographic measures and relationships that underpin any study of population are first introduced before moving to a detailed examination of the complex set of relationships which underlay Europe's 'demographic transition'. Practical sessions provide hands-on experience of working with historical population sources. Particular attention is paid to geographies of population change in England and Scotland. The module provides a firm foundation from which to develop an understanding of contemporary population change.				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours lectures (x 5 weeks); 1 hour lecture (x 3 weeks); 1 hour seminar (x 3 weeks); 2 hours practical/skills training (x 3 weeks); 2 hour seminar (x 1 week); 2 hour feedback/revision session (x 1 week)			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 175 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> Coursework = 40%, Written Examination= 60%			
<b>Module Co-ordinator:</b>	Prof E F Graham			
<b>Lecturer(s)/Tutor(s):</b>	Prof E F Graham			

GG3232 Housing, Community and Social-Spatial Justice				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This interdisciplinary module brings a Housing Studies perspective to the study of Urban Social Geography. Social geography is a sub-discipline that is interested in social relations and social difference. It has an analytical focus on the forms of power that lead to social and spatial inequality. Through engaging with contemporary policy and political debates about poverty and place, urban marginality and social-spatial (in)justice, this module emphasises the way in which geographical knowledge can be usefully applied to contemporary urban social 'problems'. In doing so, it also highlights how communities themselves have been active in leading place-based solutions to build better places.				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar (x 11 weeks) + 2 x 1-hour revision sessions			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr K McKee			
<b>Lecturer(s)/Tutor(s):</b>	Dr K McKee			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

GG3234 Migration and Transnationalism				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module is designed to advance students' appreciation of the chief academic arguments associated with migration and transnationalism. Geographical analysis of the changing role of labour migration in the world economy offers a distinctive perspective on this spatially, socially and economically selective process. Other new mobilities, such as the very significant increase in international student mobility, illustrate the complex ways in which globalisation interfaces with the efforts of individuals, families and communities to add to their social and cultural capital. Although dominantly concerned with international mobility, other scales of analysis will also be considered (e.g. the body). Finally, the course briefly covers issues associated with immigration, refugee and asylum policies.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 hour lecture and 1 hour seminar (x 10 weeks) + 2 x 1-hour essay feedback and exam revision sessions.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof A M Findlay			
<b>Lecturer(s)/Tutor(s):</b>	Prof A M Findlay, Dr D McCollum			

GG3262 Climate and Weather Systems				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Weather affects every aspect of life, and is a fundamental control on many environmental systems. This module explores the workings of the atmosphere at a wide range of scales, from the formation of clouds and raindrops, through thunderstorms and cyclones, up to large-scale circulation of the atmosphere. Beginning from first principles, key physical processes are introduced and used to develop a deep understanding of the earth's weather and climate. The module concludes with a critical examination of the climate change debate.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development, or - by arrangement - Environmental Geoscience			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours lectures and 2 hours seminars (x 5 weeks) + 2 x 1-hour essay feedback and exam revision sessions			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof D I Benn			
<b>Lecturer(s)/Tutor(s):</b>	Prof D I Benn			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

GG3263 Glaciers and Glaciation				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>In recent years, concern has risen about the impact of climate change on glaciers and ice sheets, and the implications for sea level rise, natural hazards and water resources. This course critically evaluates these issues, and explores the fundamental glaciological processes required to understand them. The first part of the course focuses on how glaciers function and interact with climate, and covers glacier mass balance (snowfall and ice melt), hydrology, processes of glacier motion and ice dynamics. The second part then applies these principles to important issues, such as glacier lake outburst floods, water resources in glacier-fed river basins, the future of the Antarctic and Greenland Ice Sheets, and sea level change.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development, or - by arrangement - Environmental Geoscience			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar (x 11 weeks) + 1 x 1-hour revision session + 1 residential (two-day – 16 hours) field course during the semester.			
	<b>Scheduled learning:</b> 37 hours		<b>Guided independent study:</b> 163 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof D I Benn			
<b>Lecturer(s)/Tutor(s):</b>	Prof D I Benn			

GG3264 Oceans and Climate				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>The oceans play a key role in the global climate system. The aim of this module is to foster an understanding of: (1) changes in ocean circulation and climate, the possible mechanisms for such changes and the wider implications in terms of past, present and future global and regional climates; and (2) to provide an introduction to some of the research methods employed to determine oceanographic changes.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development, or - by arrangement - Environmental Geoscience			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar (x 11 weeks) + 1 x 1-hour revision session during the semester.			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 177 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr W E N Austin			
<b>Lecturer(s)/Tutor(s):</b>	Dr W E N Austin			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

GG3301 Special Topic for Joint or Major Honours in Geography (Junior Honours)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Entry to a Joint or Major Honours programme in Geography.			
<b>Planned timetable:</b>	To be arranged.			
This module is designed to allow Joint or Major Honours students in their Junior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment.				
<b>Programme module type:</b>	Compulsory for Joint Honours Geography Optional for all 'Geography with' degrees			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 77 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D McCollum			
<b>Lecturer(s)/Tutor(s):</b>	Various			

GG3302 Special Topic for Honours in Geography (Senior Honours)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Entry to a Joint or Major Honours programme in Geography, or Single Honours Geography.			
<b>Planned timetable:</b>	To be arranged.			
This module is designed to allow Honours students in their Senior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment.				
<b>Programme module type:</b>	Optional for Joint Honours Geography, all 'Geography with' degrees and Single Honours students also taking ID4001 or ID4002.			
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in GG2011 and GG2012			
<b>Required for:</b>	Single Honours Geography students also taking ID4001 or ID4002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 77 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D McCollum			
<b>Lecturer(s)/Tutor(s):</b>	Various			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

<b>GG4201 Advanced Debates in Geography</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module extends and provides a summation of work undertaken in the geography Honours programme, providing students with an opportunity to reflect on the scope and diversity of geography as a discipline and to think holistically about their own learning. The module is structured around a set of readings and seminars that encourage student to study and debate important contemporary issues and debates within geography (e.g. climate change, globalisation, the nature of social inequality, the interface between nature and culture). It is examined with a single three-hour examination comprised of a mixture of seen and unseen exam questions. These address the nature of geography as a discipline and the way in which geographical reasoning has or might be applied to significant contemporary issues.</p>				
<b>Programme module type:</b>	Optional for Single Honours Geography and all 'Geography with' degrees			
<b>Pre-requisite(s):</b>	GG3201, SG3201			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 x 2-hour seminars during the semester.			
	<b>Scheduled learning:</b> 12 hours		<b>Guided independent study:</b> 88 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr D W Clayton			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

<b>GG4297 Joint Honours Research Dissertation in Geography</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The research dissertation is the fundamental piece of independent work upon which the Geography degree is based. It provides students with the opportunity to design and undertake an independent, original piece of empirical research under the supervision of a member of staff. The dissertation is a substantial, independent piece of research that represents the culmination of both substantive and core training in Geography. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for Joint Honours Geography			
<b>Pre-requisite(s):</b>	GG3202, SG3202		<b>Anti-requisite(s):</b>	GG4298
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor)			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 292 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr E Ferraro			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

GG4298 Research Dissertation in Geography				
<b>SCOTCAT Credits:</b>	50	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The research dissertation is the fundamental piece of independent research work upon which the Geography degree is based. It provides students with the opportunity to design and undertake an independent, original piece of empirical research under the supervision of a member of staff. The dissertation is a substantial, independent piece of research that represents the culmination of substantive and core training in Geography. An important component of the dissertation is the annual Senior Honours Research Conference at which all students present their work to members of the school and to Junior Honours students in either oral paper sessions or scientific poster sessions. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for Single Honours Geography, all 'Geography with' degrees			
<b>Pre-requisite(s):</b>	GG3201 or GG3203, SG3201 or SG3203	<b>Anti-requisite(s):</b>	GG4297	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor), plus a 1 day (8-hour) conference			
	<b>Scheduled learning:</b> 16 hours		<b>Guided independent study:</b> 490 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation and Conference paper = 100%			
<b>Module Co-ordinator:</b>	Dr E Ferraro			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

GG4301 Advanced Study for Joint or Major Honours in Geography				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module is designed to allow Joint or Major Honours students in their Senior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment, at 4000-level (an advanced essay).</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography except Single Honours			
<b>Pre-requisite(s):</b>	Entry to a Joint or Major Honours programme in Geography, and normally a pass in one of GG3202, GG3203, or SG3202, SG3203			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 77 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D McCollum			
<b>Lecturer(s)/Tutor(s):</b>	Various			

**Geography & Geosciences - Honours Level 2014/15 - August 2014**

<b>ID4442 Combined Research Project in Biology and Geology</b>			
<b>SCOTCAT Credits:</b>	45	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Planned timetable:</b>	To be arranged.		
<p>This module provides an individual research project on a topic spanning the biological and geological sciences which allows the student to pursue in depth a topic of personal interest. The student works largely independently of supervision and has the opportunity to demonstrate individuality, initiative and enterprise. The project will be supported by advisors in both Biology and Geology. Skills of planning and executing research are learnt, as well as the ability to work independently, and present the results orally and in dissertation form (up to 10,000 words). (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>			
<b>Programme module type:</b>	Compulsory for BSc Honours programme in Biology and Geology		
<b>Pre-requisite(s):</b>	Admission to BSc Honours programme in Biology and Geology		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision by member(s) of teaching staff		
	<b>Scheduled learning:</b> 20 hours	<b>Guided independent study:</b> 430 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%		
	<b>As used by St Andrews:</b> Research proposal = 5%, Oral Presentation = 10%, Dissertation = 85%		
<b>Module Co-ordinator:</b>	Dr T Raub		
<b>Lecturer(s)/Tutor(s):</b>	Dr T Raub		

Sustainable Development (SD) modules

SD3221 Frontiers in Sustainability Research: Do Good Lives Cost the Earth?			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
<p>Material wealth has arguably created a 'culture of surplus' through which the pursuit of improved personal well-being has involved ever greater consumption of material goods, leaving in its wake a legacy of environmental problems (Ryan and Deci 2001). Yet across the world, people have often reported having long and happy lives ('happy life years'), whilst consuming different levels of resources (Seaford 2011). The security of these resources varies enormously too with potential implications for well-being, and much of this security is changing with increasing global connectivity and shifts from subsistence to monetary economies (Fazey et al., 2011). This module draws on evidence and literature from across several disciplines (for example, geography, psychology, sociology, politics) to explore the relationship between personal well-being and planetary well-being (via environmental behaviour). It will look at and critically assess models of personal well-being and environmental behaviour, notions of the 'good' life, and behaving 'well'. It will also explore debates around responsibility for personal well-being and environmental behaviour, and how that is manifest in processes of policy-making.</p>			
<b>Programme module type:</b>	Optional for all degrees involving Sustainable Development or Geography		
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in (SD2001 and SD2002) or (GG2011 and GG2012)		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 11 weeks), 3 x 2-hour seminars and 1 x 2-hour tutorial during the semester		
	<b>Scheduled learning:</b> 30 hours	<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%		
	<b>As used by St Andrews:</b> Coursework = 40%, 2-hour Written Examination = 60%		
<b>Module Co-ordinator:</b>	Dr L A Reid		
<b>Lecturer(s)/Tutor(s):</b>	Dr L A Reid		



**Geography & Geosciences - Honours Level 2014/15 - August 2014**

<b>SD3237 Sustainability in Place: fieldclass in Ecuador</b>			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Availability restrictions:</b>	CANCELLED-Due to unforeseen problems of political unrest and government travel warnings Not available to General Degree Students.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module prepares for, and culminates in a 2-week field class in Ecuador that includes: visits to sustainability projects; having a full immersion experience in indigenous communities; and engaging in conversations and activities with indigenous peoples around issues of environmental conservation, ethnic claims and sustainability in general. The module will involve conceptual engagement with the literature on “place” and its role in sustainability theories and practice, and critical reflection on indigenous knowledge, indigenous ways of knowing and the challenges they present to the sustainability scholarship. This will be accompanied by the opportunity to assess and experience, “in the field”, the relevance of these conceptual debates under the careful guidance of Ecuadorian indigenous leaders. Reflexive diary keeping will provide an opportunity for students to reflect on their own experience of learning that will then be articulated in a reflexive essay.</p>			
<b>Programme module type:</b>	Optional for Sustainable Development		
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in (SD2001 and SD2002) and/or GG2012 and/or SA2002		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour lecture, 1-hour seminar (x 5 weeks) 2 weeks' fieldwork (80 hours) in total.		
	<b>Scheduled learning:</b> 90 hours	<b>Guided independent study:</b> 110 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr E Ferraro		

## Geography & Geosciences - Honours Level 2014/15 - August 2014

SD4299 Dissertation in Sustainable Development			
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to students who intend an Honours Degree in Sustainable Development.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module is largely based upon independent study. Students select a research question in Sustainable Development, mount a research programme to investigate the topic, and write a dissertation on the work. The topic is selected during the second semester of the junior honours year; data can be collected during the following vacation with data analysis and the writing of the dissertation taking place over both semesters of Senior Honours. Each student is supervised by a member of the teaching staff from an appropriate disciplinary area who will ensure that the topic chosen is viable and advise students on data collection and analysis. Students attend an introductory session at the start of semester 2, followed by a series of 'workshop' sessions covering aspects of research design and process during the semester. Individual tutorials are decided between the individual student and their supervisors. The dissertation will normally be based in the disciplinary area of the student's partner subject, but in recognition of the interdisciplinary nature of the field of study of sustainable development and of the SD Programme, the dissertation will itself be interdisciplinary to some extent. The dissertation is a maximum of 15,000 words in length. Students present their findings at a dissertation conference and write an abstract for inclusion into the conference handbook to convey their results to an academic audience.</p>			
<b>Programme module type:</b>	Compulsory for Sustainable Development		
<b>Pre-requisite(s):</b>	One of SD3201, SD3202, SD3203, SD3204, SG3201, SG3202, SG3203, SG3204		
<b>Anti-requisite(s):</b>	SD4002		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor), plus a 1 day (8-hour) conference		
	<b>Scheduled learning:</b> 16 hours	<b>Guided independent study:</b> 584 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 5%, Coursework = 95%		
	<b>As used by St Andrews:</b> Dissertation and Conference Paper = 100%		
<b>Module Co-ordinator:</b>	Dr E Ferraro		
<b>Lecturer(s)/Tutor(s):</b>	Team taught		

## Sustainable Geography (SG) modules

<b>SG3201 Single Honours Research Design and Methodology Training (60)</b>			
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Not available to General Degree Students.		
<b>Planned timetable:</b>	To be arranged.		
This module occupies a central place in our field-based research-orientated degree. It prepares students to undertake their independent research dissertation and develops transferable professional skills useful beyond graduation. Students learn about research design and the collection of original empirical data through engagement with a series of problem-based issues in geography and sustainable development. Themes covered include: training in quantitative, qualitative, and physical research methods; ethics of research; statistical techniques; cartography; and GIS (Geographical Information Systems). There is opportunity for streaming and choice amongst units covering these themes. Skills and techniques learned are applied during a residential field course where students will design and execute an original empirical research project with a staff mentor. The module concludes with students producing an independent research proposal for their Senior Honours dissertation projects.			
<b>Programme module type:</b>	Compulsory for Single Honours Geography and one of SG3201 - SG3204 is compulsory for Sustainable Development		
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)	<b>Anti-requisite(s):</b>	SG3202, SG3203, SG3204, GG3201, SD3201
<b>Required for:</b>	GG4201, SG4221, SG4222, SG4223, SG4224, GG4298, SD4299, GG4301		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours of classroom time (x 11 weeks), and a 1-week (40 hour) field class		
	<b>Scheduled learning:</b> 150 hours	<b>Guided independent study:</b> 450 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr D McCollum		
<b>Lecturer(s)/Tutor(s):</b>	Team taught		

## Geography & Geosciences - Honours Level 2014/15 - August 2014

SG3202 Joint Honours Research Design and Methodology Training (30)			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Not available to General Degree Students.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module occupies a central place in our field-based research-orientated degrees. It prepares students to undertake their independent Joint Honours research dissertation and develops transferable professional skills useful beyond graduation. It is designed to prepare students for undertaking original, empirical research by introducing them to the general principles, methodologies, and methods used in the collection and generation of data. It prepares students to undertake their independent research dissertation, and provides transferable skills useful beyond graduation. Joint Honours students need to make an informed choice, with the help of their Advisor, to select from the units shared with the larger 60-credit SG3201. The module concludes with students producing an independent research proposal for their Senior Honours dissertation research.</p>			
<b>Programme module type:</b>	Compulsory for Joint Honours Geography One of SG3201 - SG3204 is compulsory for Sustainable Development		
<b>Pre-requisite(s):</b>	Passes at Grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)	<b>Anti-requisite(s):</b>	SG3201, SG3203, SG3204, GG3202, SD3202
<b>Required for:</b>	SG4221, SG4222, SG4223, SG4224, GG4297, GG4301		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 7.5 weeks).		
	<b>Scheduled learning:</b> 75 hours	<b>Guided independent study:</b> 225 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr D McCollum		
<b>Lecturer(s)/Tutor(s):</b>	Team taught		

## Geography & Geosciences - Honours Level 2014/15 - August 2014

SG3203 Research Design and Methodology Training (50)			
<b>SCOTCAT Credits:</b>	50	SCQF Level 9	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Not available to General Degree Students.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module occupies a central place in our field-based research-orientated degrees. It prepares students to undertake their independent 50-credit research dissertation (GG4298) and develops transferable professional skills useful beyond graduation. Students will learn about research design and the collection of original empirical geographic data through engagement with a series of problem-based geographical issues. Themes covered include: the history and philosophy of geography; ethics of research; statistics for geographers; cartography; GIS; and quantitative, qualitative and physical research methods. Students are also required to attend an overseas field course. There is opportunity for streaming and choice amongst units covering these themes, and Major Honours students will need to make an informed choice, with the help of their advisor, to select from the units shared with the larger 60-credit GG3201. The module concludes with students producing an independent research proposal for their Senior Honours dissertation research.</p>			
<b>Programme module type:</b>	Compulsory for Geography with Social Anthropology, Geography with Spanish One of SG3201 - SG3204 is compulsory for Sustainable Development		
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in GG2011 and GG2012	<b>Anti-requisite(s):</b>	SG3201, SG3202, SG3204, GG3203, SD3203
<b>Required for:</b>	GG4201, SG4221, SG4222, SG4223, SG4224, GG4298, SD4299, GG4301		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 8.5 weeks), and a 1-week (40 hour) field class.		
	<b>Scheduled learning:</b> 125 hours	<b>Guided independent study:</b> 375 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr D McCollum		
<b>Lecturer(s)/Tutor(s):</b>	Team taught		

## Geography & Geosciences - Honours Level 2014/15 - August 2014

SG3204 Method, Field , Data: Research Training (40)				
<b>SCOTCAT Credits:</b>	40	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Not available to General Degree Students.			
<b>Planned timetable:</b>	To be arranged.			
This module is a core research design and methods training module. It is organised around a series of problem-based learning units where introductory lectures lead onto the practical implementation of particular methods. The focus is on the collection and generation of data which then leads onto the rigorous analysis of data in Senior Honours. It includes a week-long research-based fieldclass organised around the design and implementation of a specific research project. The module provides fundamental training for the independent Senior Honours dissertation project.				
<b>Programme module type:</b>	One of SG3201 - SG3204 is compulsory for Sustainable Development			
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in SD2001 and SD2002	<b>Anti-requisite(s):</b>	SG3201, SG3202, SG3203, SD3204	
<b>Required for:</b>	SG4221, SG4222, SG4223, SG4224, GG4298, SD4299, GG4301			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 8 weeks) plus a 3-day fieldclass.			
	<b>Scheduled learning:</b> 104 hours		<b>Guided independent study:</b> 296 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%			
	<b>As used by St Andrews:</b> Coursework = 100% Each unit in the module will have different forms of coursework assessments. In addition, students will have to produce a group presentation, based upon the work done during the fieldclass, which will be individually assessed.			
<b>Module Co-ordinator:</b>	Dr D McCollum			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

SG3229 Environmental Management in Scotland				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module explores current environmental management issues in Scotland. It discusses the primary sectors of land & resource management (e.g. forestry, agriculture, wildlife management, freshwater resource management, conservation, renewable energy), and explores how these systems interact. The aim is to leave students with an informed conceptual and empirical framework for evaluating management proposals and their implications for environmental, economic and social change. A particular focus, employing topical case studies and a field visit, is the conflicts that arise as interest groups with contrasting philosophies & value systems compete to shape the future of Scotland's natural heritage within a devolved political framework and in the context of climate change.				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 10 weeks) + 2 x 1-hour feedback/revision sessions and a 1-day (8 hour) field excursion.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical Examination = 20%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Dr C R Warren			
<b>Lecturer(s)/Tutor(s):</b>	Dr C R Warran			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

SG3272 Long-term Perspectives on Sustainability				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module examines how long-term perspectives on human-environment interactions can inform modern understandings of sustainability. Although sustainability is a modern concern, many of its problems are very similar to those faced by societies in the past: climatic change, resource degradation, extreme events, conflict and natural hazards. This module illustrates how we can investigate past human-environment interactions through careful consideration of palaeoenvironmental data, and then consider how this can be used to understand how past societies coped, or failed to cope, with a range of problems. This idea will be illustrated with a range of case studies across the North Atlantic islands and the Pacific islands.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour lecture, 1-hour seminar (x 10 weeks), 6 office hours over semester.			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 174 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Streeter			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Streeter			

SG3274 Landscape Ecology and Sustainability Science				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Landscape ecology provides an integrative theoretical basis and a suite of technical tools for understanding biophysical and socio-economic phenomena in diverse landscapes, as well as for biodiversity conservation, ecosystem management, landscape planning and design, and sustainability science. Landscape ecology is a growing profession in the UK and overseas. Working at the landscape scale is now integral to the UK land use planning system and is increasingly emphasised in the sphere of land management. Implementing environmental policies and strategies on the ground needs to take a wide range of factors into consideration. A holistic vision and practical tools are needed to integrate those factors to reach sustainable solutions. The course focuses on applied case studies providing the views and experiences of practitioners and scientists coming from a range of institutions in Scotland (e.g. CEH, James Hutton Institute, Centre for Mountain Studies) and France (IRSTEA).</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour lecture, 1-hour seminar (x 9 weeks), 6 office hours over the semester			
	<b>Scheduled learning:</b> 24 hours		<b>Guided independent study:</b> 176 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S Luque			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Luque, Prof M Price, Pro A Hester			

## Geography & Geosciences - Honours Level 2014/15 - August 2014

SG4221 Review Essay				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This elective requires students, working independently, to identify and critically review a body of literature, giving an account of its substantive content, and critically assessing the evidence on which it is based. Students can either identify an intellectual field that lies outside those addressed in available 3000-level options modules, or build on a field covered in the programme, pursuing it at greater depth. In addition to supervisory sessions and module tutorials, students may also attend sessions in a relevant 3000-level option module running in the same semester.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes in one of SG3201, SG3202, SG3203, SG3204, GG3201 - GG3204, SD3201 - SD3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Introductory lecture and seminar (2 hours) followed by guided independent study (one-to-one supervision)			
	<b>Scheduled learning:</b> 2 hours		<b>Guided independent study:</b> 198 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof C Ballantyne			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

SG4222 Advanced Qualitative Analysis				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module offers advanced training in methods of qualitative analysis that facilitate dissertation work and develop transferable skills for future careers. Learning is project/problem-based, and students gain practical experience of working with a range of qualitative data (e.g. archives, visual and textual documents and interview transcripts) using a range of analytical approaches (e.g. discourse analysis, deconstruction, grounded theory and computer-assisted qualitative analysis). Research data are drawn from a range of areas within geography and sustainable development. . Techniques, themes and materials will vary according to staff availability.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes in one of SG3201, SG3202, SG3203, SG3204, GG3201 - GG3204, SD3201 - SD3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour seminar (x 12), 1 hour lecture (x 7), 1 x 2-hour practical, 3 x 1-hour practical, 2 seminars and 2 practical classes.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K McKee			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			



## Geography & Geosciences - Honours Level 2014/15 - August 2014

SG4223 Advanced Quantitative Analysis				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Students taking this module will learn some of the core research skills necessary to be a professional quantitative social science researcher and then to carry out a typical consulting project. It will allow them to explore a substantive policy issue, carry out their own quantitative research and then make recommendations based on these findings. They will be presented with a 'real world' scenario and be expected to take on the role of a researcher who is advising policy makers; in simulations of various policy forums, they will then learn how to defend their recommendations and advice. They will first be taught the relevant quantitative research skills and introduced to potentially useful research resources. They will then be expected to construct their own research strategy, carry out the necessary research and present this in various formats, working independently of the teaching staff.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes in one of GG3201, GG3202, GG3203, SD3201 - SD3204, SG3201 - SG3204			
<b>Anti-requisite(s):</b>	GG4223, SD4223			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures, 2-hour seminars, 1-hour practical classes each week for 7 weeks, and occasional tutorials.			
	<b>Scheduled learning:</b> 38 hours		<b>Guided independent study:</b> 162 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 13%, Coursework = 87%			
	<b>As used by St Andrews:</b> Practical Examination = 13%, Coursework = 87%			
<b>Module Co-ordinator:</b>	Dr Z Feng			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

SG4224 Advanced Topics in Physical Sciences				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces students to a range of advanced and cutting edge topics in Physical Geography and other physical sciences relevant to geography and sustainable development. Four topics are offered each year that build on material explored in 3000-level Honours modules, and which expand and deepen students' practical skill set. Students choose two of the four topics. Each topic includes in-depth study of the primary literature, combined with advanced training in analytical, technical or methodological approaches, thus integrating "hands-on" applied learning with critical reading of the primary literature. The module complements and expands the learning acquired in SG3201-SG3204, and provides additional resources for the development of students' individual dissertation projects.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development			
<b>Pre-requisite(s):</b>	Passes in one of SG3201, SG3202, SG3203, SG3204, GG3201 - GG3204, SD3201 - SD3204			
<b>Anti-requisite(s):</b>	GG4224, SD4224			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hour lectures (x 9 weeks) and 1 x 1/2-day (4 hour) field class.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Streeter			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			



## School of History

Including: Mediaeval, Modern and Scottish History, Mediaeval Studies and Middle East Studies (see also Ancient History within the Classics section, and Arabic within the Modern Languages section)

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### History (HI) modules

HI4101 Communication in History			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Available only to students in the Second year of the Honours Programme.		
<b>Planned timetable:</b>	To be arranged.		
This module is a part of 'Communication and Teaching in Arts and Humanities' in which students gain substantial experience of a working environment. This component offers the opportunity to further develop an area of interest in communicating themes in History to contemporary contexts. It is available only to participants in the placement module. Students will normally take this module in Semester 1 but, with the permission of the Director of Teaching, it may be taken in Semester 2.			
<b>Programme module type:</b>	With permission, this is an optional module (taken with ID4002) for History, Single Honours Mediaeval History, Middle East Studies, Modern History, Scottish History		
<b>Co-requisite(s):</b>	Usually ID4002		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Fortnightly tutorials.		
	<b>Scheduled learning:</b> 6 hours	<b>Guided independent study:</b> 144 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr S Tyre		

## History - Honours Level - 2014/15 - August 2014

HI4997 Recording the Past			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Available only to students in the Second year of the Honours Programme.		
<b>Planned timetable:</b>	To be arranged.		
<p>With the consent of the module coordinator and of the Chair of the Degree Committee, candidates may submit a project in the form of a radio programme, video documentary, website or other appropriate medium. RECORDING THE PAST is designed to encourage the development of skills of historical analysis through concentrated study on a chosen topic and, in addition, the development of new skills of presentation through multimedia. Group projects are welcome, their volume being dependent on the numbers involved. Regardless of the medium used, the project outcome is assessed on the quality of the research and analysis (including oral interviews and photographic, film or sound sources) and on the technical quality of the final outcome. The project may build on work already done in another module, but it must break new ground and use substantially new research. While some training in multimedia techniques will be offered, the student should already possess some experience in the medium in which he/she chooses to present the project.</p>			
<b>Programme module type:</b>	HI4997, HI4998, CL4999 or with permission HI4999 is compulsory for History. HI4997, HI4998, or with permission HI4999 is compulsory for Modern History, Scottish History, and BA (Intl Hons) History. HI4999 (or HI4997 or HI4998 when permitted to take ID4002 and HI4101) is compulsory for Mediaeval History, Mediaeval Studies Optional for Middle East Studies.		
<b>Anti-requisite(s):</b>	HI4998, HI4999, ME4998, CL4999		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly seminars, fieldwork and film/video viewing.		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Prof G DeGroot		
<b>Lecturer(s)/Tutor(s):</b>	Prof G DeGroot		

HI4998 Honours Project in History				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in the Second year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module involves oral presentation as well as written submission. It is designed to encourage the development of skills of historical analysis through the concentrated study of a chosen topic. It generally takes the form of an extended essay (maximum 8,000 words) on a narrowly defined topic, but may also involve new developments in learning and information dissemination, such as the production of a website, film or video, etc. Group projects are also welcome, their length being dependent on the numbers involved. The project outcome is assessed on the quality of the library research and analysis shown in the written submission (75%) and on the oral presentation of the findings to other students and two tutors (25%). The project may build on work you have done in another module, but it must break new ground and use substantially new research. It must not have been submitted in whole or part for any other module.</p>				
<b>Programme module type:</b>	HI4997, HI4998, CL4999 or with permission HI4999 is compulsory for History. HI4997, HI4998, or HI4999 with permission is compulsory for Modern History, Scottish History and BA (Intl Hons) History. HI4999 (or HI4997 or HI4998 when permitted to take ID4002 and HI4101) is compulsory for Mediaeval History, Mediaeval Studies Optional for Middle East Studies.			
<b>Anti-requisite(s):</b>	HI4997, HI4999			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Fortnightly tutorials.			
	<b>Scheduled learning:</b> 12 hours		<b>Guided independent study:</b> 288 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr G Rowlands			

## History - Honours Level - 2014/15 - August 2014

HI4999 Honours Dissertation in History			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second year of the Honours Programme.		
<b>Planned timetable:</b>	To be arranged.		
<p>The dissertation must consist of between 10,000 and 12,000 words of English prose on a topic agreed between the student and an appropriate member of staff (who acts as supervisor). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the candidate if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisor in order to determine that the student has access to sources as well as a clear plan of preparation. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>			
<b>Programme module type:</b>	<p>HI4997, HI4998, CL4999 or with permission HI4999 is compulsory for History.                      HI4997, HI4998, or with permission HI4999 is compulsory for, Modern History, Scottish History and BA (Intl Hons) History.                      HI4999 (or HI4997 or HI4998 when permitted to take ID4002 and HI4101) is compulsory for Mediaeval History, Mediaeval Studies                      With permission, Optional for Middle East Studies.</p>		
<b>Anti-requisite(s):</b>	HI4997, HI4998, ME4998, CL4999		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Tutorials as required.		
	<b>Scheduled learning:</b> 12 hours	<b>Guided independent study:</b> 288 hours	
<b>Assessment pattern:</b>	<p><b>As defined by QAA:</b>                      Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%</p>		
	<p><b>As used by St Andrews:</b>                      Dissertation = 100%</p>		
<b>Module Co-ordinator:</b>	Dr B Struck		

## Mediaeval History (ME) modules

ME3101 Britons and Saxons				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module will examine the relationship between English and British communities in the early medieval period, focusing on conflict and interaction. This period is characterised by both the emergence of kingdoms amongst the English and by the conquest by these kingdoms of most of the territories occupied by the Britons at the beginning of the period. Social and economic aspects of this competition for resources will be examined as will warfare and ecclesiastical structures. The complex debate of what early English society owed to the preceding British society will run across the whole module. The module will rely upon both textual and archaeological materials.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar and 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 8%, Coursework = 32%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A D Woolf			
<b>Lecturer(s)/Tutor(s):</b>	Dr A D Woolf			

ME3103 Mediaeval Rome c. 590 - c. 1300				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module surveys the history of a city which encapsulates many issues central to the history of the Latin West from the time of Pope Gregory I (590-614) to the Jubilee of 1300 and the departure of the popes for Avignon. Topics covered will include topography, city government, ritual and public space, insiders and outsiders, conflict and defence, relations with the surrounding territory and the 'papal states', the 'marvels of Rome' and the imperial heritage. The teaching will use both written sources in translation and archaeological and art historical evidence.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof F Andrews			
<b>Lecturer(s)/Tutor(s):</b>	Prof F Andrews			

## History - Honours Level - 2014/15 - August 2014

ME3162 The Mediaeval Castle				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module surveys the architectural development of mediaeval castles in Western Europe and the Near East from the eleventh to the fifteenth centuries. About half the time is devoted to castles in the British Isles and the other to selected areas elsewhere, notably France, Spain, the Baltic lands and the Crusader Levant. The emphasis will be on archaeological and architectural history and the role of the castle in war and peace.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	ME3411			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A D Stewart			
<b>Lecturer(s)/Tutor(s):</b>	Dr A D Stewart			

ME3163 Constantinople				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module provides a detailed historical introduction to one of the greatest cities in history: Constantinople or Istanbul, capital first of the Byzantine and then of the Ottoman Empire. We will be studying the city as a continuous geographical space stretching across a millenium and a half; its structure and life at certain key moments; and how it changed over time. Specific themes to be considered include defense and provisioning, the urban economy, imperial and sacred space, and perception by inhabitants and visitors. Sources include chronicles, travel narratives, and other literary texts, as well as archeological and architectual plans and administrative documents.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	ME3218, ME4854			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr D Kastritsis			



ME3206 Heretics and Social Outcasts in Western Europe				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This option examines the rise and spread of heresy in the West. It explores in particular the reasons why heresy produced such strong reactions and compares and contrasts the treatment of heretics with that given to other social marginals.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Middle East Studies, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 8%, Coursework = 32%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof F E Andrews			
<b>Lecturer(s)/Tutor(s):</b>	Prof F E Andrews			

ME3231 Mediaeval Apocalyptic Traditions 400 - 1200				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module explores the influence of apocalyptic thought on European history in the Middle Ages. It focuses on the different groups who proclaimed or denied the imminence of the end of time, examining their importance for political, social and cultural changes across the period. Apocalyptic thought will also be studied as a response to crisis, particularly in times of invasion or political fragmentation. The module will draw on a range of primary literary and artistic sources to help evaluate modern debates on the significance of apocalypticism in the Middle Ages.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr J Palmer			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Palmer			

## History - Honours Level - 2014/15 - August 2014

ME3233 Power and Identity after Rome 500 - 700				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module surveys the formation of the key 'barbarian kingdoms' which emerged in the post-Roman West. It is a period once characterised as a 'Dark Age' in which civility and learning gave way to violence and superstition. We will challenge such assumptions as we explore the rich political and cultural worlds of the Gothic and Frankish 'successor states'. In the first half of the module, the focus is on the creation of power in Italy, Spain and Frankia. The second half compares the customs and beliefs of the kingdoms, as well as investigating the ways in which different political and social groups interacted.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr J Palmer			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Palmer			

ME3235 Mediaeval Political Thought				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module will explore the ideas that shaped social and political life in the West during the middle ages. Students will examine how constantly evolving concepts such as authority, liberty, and justice have been fundamental in influencing how modern society looks today. An understanding of such ideas is crucial for a proper understanding of Western history, and this module will examine the development of political thought and its historical context throughout the mediaeval period. Students will be introduced to the works of highly influential authors such as Aristotle and St. Augustine, and explore how their ideas were adopted and developed by mediaeval writers such as John of Salisbury, Thomas Aquinas, Dante Alighieri, and Niccolo Machiavelli.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 8%, Coursework = 32%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Cox			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Cox			

ME3236 Soldiers and Saints in Late Roman Gaul				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module examines the transformation of Gaul, the transalpine portion of the Roman Empire, in the period from c.379 to 455. This period saw the extensive Christianisation of the region, including the introduction of monastic ideas from the near east. It also saw political fragmentation including the earliest establishment of barbarian kingdoms within the Roman Empire. Goths, Franks and Huns will all feature, as will the earliest western hagiography, Sulpicius Severus's Vita Martini, and the letters of St Patrick. Students will be encouraged to consider the contesting explanations of why a society which had retained considerable stability for four centuries broke down within a single generation.				
<b>Programme module type:</b>	Optional for Ancient History, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A Woolf			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Woolf			

ME3301 The End of the Middle Ages? Scotland and England in the Fifteenth Century				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
The neighbouring kingdoms of Scotland and England are excellent case studies through which to examine the impact of the changes affecting Europe at the close of the Middle Ages. Both faced internal conflicts, war, weak kingship, periods of political instability, and economic difficulties. Yet they also enjoyed periods of relative peace, cultural exchange and advancement, and embraced developments emerging on the Continent. Their relationships with Europe, as well as with one another, provide an insight into the pressures of rapidly changing societies, as Renaissance ideals began to impact upon a fragmenting mediaeval world. This module will assess and compare political, social, cultural, religious and economic aspects of the kingdoms of Scotland and England during the fifteenth century.				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Scottish History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	ME3014			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr K C Stevenson			
<b>Lecturer(s)/Tutor(s):</b>	Dr K C Stevenson			

## History - Honours Level - 2014/15 - August 2014

ME3303 The Renaissance in Late Mediaeval Scotland				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
The century between 1450 and 1550 was a true 'golden age' of Scottish culture, encompassing not only the literary output of the Makars - Henryson, Dunbar, Douglas and Lindsay - but also a rich variety of other cultural achievements in fields as diverse as philosophy, music and architecture. The purpose of this module is to explore the full range of Scottish cultural life in the Renaissance period in its social and political contexts and with reference to the wider world of European culture.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Scottish History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr K C Stevenson			
<b>Lecturer(s)/Tutor(s):</b>	Dr K C Stevenson			

ME3304 Age of Conquest: Edward I - Scotland and Wales (1239 - 1307)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a> .			
Edward I has long been known as the conqueror of Wales, the hammer of the Scots and as a second King Arthur who united the British Isles under his rule. Praised for his rule by English writers and, yet, a hate figure for many Scots and Welsh, Edward's reign was an era of major warfare and political change on the island of Britain. The module focuses on this pivotal period in the thirteenth and early fourteenth century in which ideas of royal sovereignty and national identity worked together to produce sustained conflicts. Detailed examination of the causes and course of Edward's wars with Llywelyn prince of Wales and his settlement of that land, and analysis of the English king's dealings with Scotland, culminating in his conquest of 1296 and the rebellion and warfare which followed, provide the core of this module.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Scottish History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2 hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof M Brown			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Brown			

ME3309 Mediaeval St Andrews				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>St Andrews was of unique importance in the Middle Ages. It was the principal centre of the Scottish church, a pilgrim site of international significance, and the home of the first university in Scotland (and third in Britain after Oxford and Cambridge). It is also an excellent example of a mediaeval town. This module will explore the history of mediaeval St Andrews and consider this in relation to developments across mediaeval Europe. The module will draw on written historical sources, including those held by the Library's Special Collections, and utilise the outstanding local access to relevant material culture.</p>				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Scottish History			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr K C Stevenson			
<b>Lecturer(s)/Tutor(s):</b>	Dr K C Stevenson, Dr A Woolf, Prof M Brown			

ME3312 Kings And Rebels: Realms And Borderlands In The British Isles 1350-1420				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module examines the borderlands of late Medieval Britain and Ireland in the context of wider structures of royal authority. It deals with the defining period between 1350 and 1420 which witnessed the formation and development of different types of frontier societies in the Welsh marches, the Anglo-Scottish borders and the frontiers between English and Gaelic nations in Ireland and Scotland. The course also examines the efforts of royal governments and aristocratic dynasties to manage them. The expeditions of Richard II to Ireland, the Lordship of the Isles, the Douglas and Percy families and Owain Glyn Dwr provide examples of the dynamism and significance of marchlands in this period. The influence which borderlands exercised on the wider patterns of politics in the realms of the isles provides a major strand of discussion as does the significance of ideas of race and nation in providing a framework for political and social attitudes in this period.</p>				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Scottish History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof M Brown			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Brown			

## History - Honours Level - 2014/15 - August 2014

ME3420 Rich and Poor in the Later Middle Ages (c.1100 - c.1350)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	1 See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module will examine the attitudes towards wealth and poverty in the context of medieval western Christianity. It will explain how a religion that preached poverty dealt with wealth and the way of life of its rich faithful. It will also focus on the key role played by charity in order to shorten one's stay in purgatory and achieve salvation. The module will discuss the following topics: the chivalric virtue of largesse, conspicuous consumption, showing status through clothes, banquets (and fasting), the Franciscan ideal of holy poverty, the theological aspects of charity, how charity was practiced, hospitals, categorization of poor people, etc. The objective of the module is twofold: first, offering an overview of how the rich and the poor lived (or managed to survive) in the Middle Ages and, second, explaining how the two groups interacted and needed each other.</p>				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-Hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A Del Campo			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Del Campo			

ME3423 Justifying Mediaeval Warfare				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>A rich body of literature has emerged over the last 2,500 years concerning the moral challenges posed by warfare. Through Classical Greece and Rome to the early Church and the Middle Ages, the justice of war has been debated in theology, philosophy and law. This module will explore how ideas of 'just warfare' developed, and how certain 'rules' emerged which were intended to regulate or limit violent conflict. Students will examine how such theories and rules were espoused, observed, and ignored during the middle ages, and compare these ideas with the realities of medieval warfare. The module will focus largely on the Western tradition and warfare, but will also include seminars on Islamic and Eastern perspectives on justified violence.</p>				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 8%, Coursework = 32%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Cox			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Cox			

ME3425 The Age of Revolt (1250 - 1450)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module focuses on rebellions, revolts, and social movements in Western and Central Europe during the long fourteenth century, a period characterised as the 'golden age of revolt'. During this period, there were dozens - perhaps even hundreds - of uprising in both towns and countryside, which challenged the established order and which led to social and political changes that would endure through the early modern period. Focusing on specific rebellions, the module will examine the economic, political, and cultural causes of revolt. Topics to be considered include identity and deviance, theories of resistance, and discourses of power.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 20%, Practical Examinations = 0%, Coursework = 80%			
	<b>As used by St Andrews:</b> 1-hour Written Examination (Class Test) = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr J M Firnhaber-Baker			
<b>Lecturer(s)/Tutor(s):</b>	Dr J M Firnhaber-Baker			

ME3426 Women and Gender in the Later Middle Ages				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module focuses on women's lives in Europe from about 1150 to about 1550. When we think about women in this period, we often assume that they had few avenues for self-expression, public recognition, or even personal happiness. In this course we will look at the social, cultural, and legal boundaries that confronted women, but our major focus will be on the lives that women were able to build despite - or even because - of these barriers. We will look at women across the social spectrum - from prostitutes to queens - and from all parts of Western Europe. We will focus less on images of women than on their actual lives. Our emphasis will be on ordinary women, but in each part of the course, we will also look at an individual or group of women to discuss how the section's themes played out on the micro level.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 15%, Coursework = 55%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr A Del Campo			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Del Campo			

## History - Honours Level - 2014/15 - August 2014

ME3602 The Crusades				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module will examine the creation and development of the crusading movement from the Council of Clermont in 1095 through to the collapse of the Crusader States in 1291 and their aftermath. The crusading movement in its widest sense will be considered, in theatres from the Baltic to the Mediterranean, from Portugal to Palestine; against Muslim, Pagan and Christian (heretical or political) enemies. The response of those societies threatened by crusading will also be considered. The module will explore the development of an ideology, the apparatus and institutions of crusading, and will seek to reach conclusions about how crusading can be explained and defined. There will be some emphasis on reading original sources in translation.</p>				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof C Hillenbrand			
<b>Lecturer(s)/Tutor(s):</b>	Prof C Hillenbrand			

ME3613 The Formation of Islamic Iran: From the Arab Conquests to the Seljuq Empire (600 - 1200)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>In the wake of the early Islamic conquests, between the seventh and twelfth centuries Iran was transformed into a predominantly Muslim society. Yet an Iranian identity with its roots in the pre-Islamic Sasanian empire and earlier was not forgotten. This module studies how Iranian and Islamic identity interacted and fused, creating a new culture expressed in the Persian language that was profoundly influential in the wider Islamic world, and was also adopted by the Turkish dynasties that dominated Iran from the eleventh century. Political, cultural and religious change in this formative period of Iranian history will be studied through both literary and material primary sources such as coins and inscriptions.</p>				
<b>Programme module type:</b>	Optional for Ancient History and Archaeology, History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Middle East Studies			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 15%, Coursework = 45%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr A Bdaiwi			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Bdaiwi			



ME3617 The Mamluks And The Bahrī Mamluk Sultanate (1250-1382)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
The module will examine the mamluk phenomenon, looking at the development of the institution. It will then consider the mamluks' rise to power in Egypt and Syria, in the face of assaults by crusaders and Mongols, and their formation of a powerful empire, and what has been termed a 'Pax Mamlukica' in the region. The structures of the Sultanate will be examined, as well as the society over which they ruled. This was a dynamic period, which witnessed significant political, military, economic and social developments; it also saw the production of numerous works of scholarship and the transformation of the urban landscape of Cairo and other cities.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A Stewart			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Stewart			

ME4710 England and France at War in the Fourteenth Century				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	9.30 am - 12.30 pm Wed			
The traditional dates of the Hundred Years War are 1337-1453. It was from the 1290s, however, that tensions began to build between England and France in the regions (such as Gascony, Scotland and the Low Countries) which were to play the crucial role in the outbreak of war in 1337, and it was during the first two decades of the fourteenth century - at Courtrai in 1302, for example, and at Bannockburn in 1314 - that the new military tactics which were to prove so effective after 1337 were developed. The initial aim of this module is to study the diplomatic and military history of England, France and their allies both in the build-up to full-scale war and during the first two phases (1337-96) of what is known as the Hundred Years War. It also looks in detail at areas such as military organisation, the chivalric ethos, the laws and customs of war in relation to things such as sieges or the treatment of prisoners of war, the economic and social impact of war, and the literature of war. A substantial part of the course will be devoted to in-depth study of contemporary chronicles of the war, particularly the chronicles of Jean Froissart.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Anti-requisite(s):</b>	ME4904			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Cox			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Cox			

## History - Honours Level - 2014/15 - August 2014

<b>ME4752 The Wars of the Bruces: Kings, Nobles and Communities in the British Isles (1306 - 1346)</b>				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	9.30 am - 12.30 pm Wed			
<p>Through much of the British Isles the opening decades of the fourteenth century were characterised by war and political troubles. The Scottish war, which had begun in the 1290s, intensified and widened through the 1300s and 1310s. The ambitions of Robert Bruce were at the heart of this extended conflict which spread from Scotland into northern England and Ireland. His opponent, Edward II of England, experienced revolts in Wales and repeated opposition and civil war in England which culminated in the first deposition of an English king since the Norman Conquest. War and rebellion in England, Scotland, Wales and Ireland involved issues of contemporary political ideology and altered the internal character and external relationships of these lands. This module uses the reigns of Robert Bruce and Edward II to examine issues of kingship, community and identity in the early fourteenth century. It pays special attention to questions of legitimate authority and resistance and examines the way in which major nobles, like Thomas of Lancaster, Roger Mortimer and James Douglas operated as royal lieutenants, leaders of the opposition or regional magnates. Particular focus is placed on the key narratives of the period like the Gesta Edwardi Secundi and John Barbour's The Bruce and on the place of kingship and community in a wider European context.</p>				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Scottish History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour meeting, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-Hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof M Brown			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Brown			

ME4753 Chivalry and Kingship: Scotland in the Late Middle Ages				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme			
<b>Planned timetable:</b>	10.00 am - 1.00 pm Wed			
Chivalry was the ethic of the elite class of medieval Europe; a sets of malleable codes that influenced the behaviour and values of the social elite. But more than that, it could be used by that elite to control, influence and shape the societies over which they governed. Scotland provides a useful case study for the examination of chivalry in the late Middle Ages: the Wars of Independence, the Hundred Years War, the Wars of the Roses, and the forging of an expanding web of political alliances by the Stewarts (one of the most successful ruling dynasties in Europe) make Scotland a fertile ground for exploring the nature of medieval kingship and the importance of chivalry.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour meeting, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 6%, Coursework = 34%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr K C Stevenson			
<b>Lecturer(s)/Tutor(s):</b>	Dr K C Stevenson			

ME4755 Norway in Saga Times				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	9.30 am - 12.30 pm Wed			
This module will look at the history and historiography of Norway between the reigns of Magnus Erlingsson and Hákon IV. This period saw the end of the debilitating civil wars which racked Norway in the twelfth century and also the flourishing of saga literature. The module will involve close reading of the contemporary sags dealing with the events of Norwegian History between c. 1157 and 1266 including the annexation of Iceland and the conflict with the Scottish crown over hegemony in the Western Isles. This is not a course about vikings.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Scottish History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour meeting, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A Woolf			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Woolf			

## History - Honours Level - 2014/15 - August 2014

ME4806 The Age of Charlemagne c. 750 - 830				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	9.30 am - 12.30 pm Wed			
<p>Charlemagne's reputation as the 'Father of Europe' has seen his memory claimed and reused by, among others, Napoleon, the Nazis, and the European Union. The study of his reign enables us to ask about the origins of Europe, and the transformation of the world of Late Antiquity into that of the Middle Ages. His reign was dominated by brutal but sophisticated military campaigning, which resulted in the rapid establishment of an empire of around 1 million square kilometres. At the same time, however, the emperor surrounded himself with the great scholars of the day, and embarked on an ambitious and serious mission to completely reform society according to Christian moral principles. Charlemagne is therefore a paradoxical and intriguing character. He is also the best documented early mediaeval ruler by some way, and we will use a variety of types of source (including annals, histories, biographies, visions, governmental records, architecture, art and poetry) to examine warfare, court politics, ritual, ideology, the cult of the saints, religious reform and culture in the late eighth and early ninth centuries. We will also study the various pagan, Christian, Islamic and Celtic societies which came under Frankish attack in the period, and consider how Charlemagne was remembered, including the rumours of scandal, incest and visions of the emperor in hell which circulated soon after his death.</p>				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour meeting, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr J Palmer			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Palmer			

ME4807 The Early Mendicants: Francis, Clare and Dominic (c. 1180 - c. 1270)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	10.00 am - 1.00 pm Wed			
This module will use a rare combination of written and visual sources to examine and compare the personalities, careers and impact of Saints Francis, Clare and Dominic and the Orders they founded. Themes to be considered will include the influence of their immediate predecessors and contemporaries in the 'evangelical awakening', the problems posed by the sources for the lives of the saints themselves, poverty, mendicancy and itinerant preaching, the impact of their cults on art and architecture, institutional developments and relations with the papacy, the secular church, the inquisition and the universities.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 6%, Coursework = 34%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof F E Andrews			
<b>Lecturer(s)/Tutor(s):</b>	Prof F E Andrews			

ME4855 Crusaders, Mongols and Mamluks: West and East in the Mid-Thirteenth Century				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	10.00 am - 1.00 pm Wed			
This module will consider the range of interactions between the Latin West and the powers and cultures of the Near East and beyond, in the period will roughly between the first two Councils of Lyons, 1245-74, both of which dealt with crusading to the Levant and with matters relating to the Mongols: initially their threat and latterly the opportunities for alliance. The module will examine the crusades of the Louis IX, in their wider context; the arrival of the Mongols in the West and the creation of Mongol states there; the foundation of the Mamluk Sultanate; and the beginnings of the Mongol-Mamluk conflict and of attempts to create an Ilkhanid-Latin alliance. We will look in some depth at a variety of sources, especially focusing on the account of Louis IX's crusade by John of Joinville, and the accounts of two Franciscan travelers in the Mongol Empire, John of Plano Carpini and William of Rubruck.				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Middle East Studies and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar and 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 6%, Coursework = 34%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A D Stewart			
<b>Lecturer(s)/Tutor(s):</b>	Dr A D Stewart			

## History - Honours Level - 2014/15 - August 2014

ME4856 From Byzantium to the Ottoman Empire			
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.		
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>		
	<p>Between the Latin occupation of Constantinople 1204–61, which coincided with the consolidation of Seljuk power in Anatolia, and the Ottoman conquest of the city in 1453, over two centuries elapsed in which the legacies of the Byzantine, Seljuk, and Mongol empires and of the Crusades remained politically and culturally influential, but real authority came to reside in a wide variety of regional actors with diverse roots (Byzantine, Turkish, French, Italian, Mongol, Albanian, Serbian, etc.) The fragmentation only ended with the final consolidation of Ottoman power in the old lands of Eastern Rome (Rum, Romania) in the second half of the fifteenth century. This module will study the period in as comprehensive a way as possible, in order to gain a broad understanding of political, economic, and cultural life.</p>		
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.		
<b>Anti-requisite(s):</b>	ME3614		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar and 1 office hour.		
	<b>Scheduled learning:</b> 198 hours	<b>Guided independent study:</b> 402 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr D Kasttritsis		
<b>Lecturer(s)/Tutor(s):</b>	Dr D Kasttritsis		

ME4998 Honours Dissertation in Mediaeval Archaeology			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second year of the Honours Programme		
<b>Planned timetable:</b>	To be arranged.		
	<p>Specialised dissertation of 7,500 - 10,000 words on a topic in Mediaeval Archaeology for Honours students in the Mediaeval History and Archaeology degree. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>		
<b>Programme module type:</b>	Compulsory for Mediaeval History and Archaeology.		
<b>Anti-requisite(s):</b>	HI4997, HI4998, HI4999		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Tutorials as required.		
	<b>Scheduled learning:</b> 6 hours	<b>Guided independent study:</b> 294 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr T G Greenwood		
<b>Lecturer(s)/Tutor(s):</b>	Dr T G Greenwood		

## Modern History (MO) modules

MO3005 The Early Reformation in Europe 1517 - 1555				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module examines the development of the Reformation as a European movement in the period of 1555. The central question addressed is why, having made such an impact on Germany, the Reformation made only sporadic progress elsewhere. Cases studied include France, England, the Netherlands, Spain and Italy. The second half of the module explores the different media of conversion through which the evangelical message was communicated.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 40%, Coursework = 60%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M McLean			
<b>Lecturer(s)/Tutor(s):</b>	Dr M McLean			

MO3019 The Life of the Mind: Key Texts in European Thought (1512 - 1697)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module explores the history of European thought between the late Renaissance and the beginning of the Enlightenment. The class will study (in translation) some of the most important texts from this period, including the work of Machiavelli, Montaigne, Grotius, Bacon, Hobbes and Bayle.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr D Allan			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Allan			

## History - Honours Level - 2014/15 - August 2014

MO3026 Art and Piety in Western Europe 1400 - 1750				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>What can visual evidence tell us about religious belief? This module will begin by exploring the use of religious images during the late-mediaeval period. In the sixteenth century Protestant reformers questioned the value of religious art, and in parts of Europe there was an extensive iconoclasm. The module will consider the motives of the iconoclasts and the forms that their actions took. The module will also look at Catholic attempts to reform religious art and at the flowering of visual piety in the wake of the Council of Trent. Classes and student assignments will make extensive use of pictures as well as of texts.</p>				
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval Studies, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr B Heal			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Heal			

MO3033 Europeans in Asia in the Early Modern Period				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module considers the exploration and exploitation of the East Indies in the early modern period. From the earliest voyages of discovery by Portuguese explorers in the late fifteenth century, the module traces the development of early trading European trading networks that initially integrated with existing Arab and Asian commercial structures and the expanding Mogul empire. From these mutually beneficial exchanges the module follows the conflict that emerged between the contesting monopoly companies that led to the eventual colonization of most of South East Asia by European powers. Viewed from the perspectives of the various concerns, the module poses questions relating to the politics, religion and cultural interaction of this important geo-political region.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar and 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof S Murdoch			
<b>Lecturer(s)/Tutor(s):</b>	Prof S Murdoch			



MO3038 War and the State in the Era of the "Military Revolution" (1550 - 1730)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>The early modern period saw considerable changes in the shape of warfare and in the nature of armed forces and the state, a process some historians have described as a "military revolution". Yet the increasing pressures of war brought about considerable social, economic and political breakdown, as rulers overburdened both their armed forces and their domestic subjects. This module will examine how western European states organised and conducted war between the late sixteenth and the early eighteenth century, and consider what effects this had on political stability. The focus will be not only on some of the great powers but also upon some minor states who punched above their weight on the international stage.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Rowlands			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Rowlands			

MO3040 From Cradle To Grave: Living and Dying in Early Modern England (c. 1500 - 1800)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module explores life and death in England during a period of profound social, political, economic, religious and legal change. Topics which may be covered include family, community, society, agriculture, industry and the organic economy, poverty and its relief, young and old, male and female, population and its determinants, the body and physical health, mental health and suicide, death. Using printed or online primary source material and secondary reading will enable students critically to summarise and evaluate scholarly arguments, assess the nature and value of historical debate, and gain insights into the long-lost material environment and mental world of this fascinating period.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3015			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof R A Houston			
<b>Lecturer(s)/Tutor(s):</b>	Prof R A Houston			

## History - Honours Level - 2014/15 - August 2014

MO3041 Culture and Mentalities in Early Modern England (c. 1500 - 1800)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module explores aspects of English life, behaviour and attitudes in a period of profound social, political, economic, religious and legal change. Topics which may be covered include religion: the development of mainstream religions, 'alternative' belief (inc. astrology and witchcraft), technology and the rise of science, environment, consumption and the world of goods, recreation and leisure, education, literacy and their uses, time, space and work, individualism and corporatism, risk and probability, crime and violence, patterns of punishment. Using printed or online primary source material and secondary reading will enable students critically to summarise and evaluate scholarly arguments, assess the nature and value of historical debate, and gain insights into the long-lost mental world of this fascinating period.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3015			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof R A Houston			
<b>Lecturer(s)/Tutor(s):</b>	Prof R A Houston			

MO3043 Early Modern Rome (1300 - 1667)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module introduces students to the city considered the centre of the Western World and the heart of Christianity and later, Catholicism during the Reformation period. It examines the changing city as well as the its changing image and propaganda during a period when its primacy and importance was constantly and violently challenged and reasserted as a symbol of civilisation.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 13%, Coursework = 47%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Michelson			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Michelson			

MO3044 Topics in Renaissance Venice				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module introduces students to the history, culture, and politics of Venice at the height of its power. Renaissance Venice was simultaneously the capital of a maritime and terrestrial empire, a glittering international destination for trade and culture, and the site of controversial innovations like Protestant thought, ghettos, and the printing press. It was for much of this era the only European model of a lasting independent republic. Then and now, it has been subject to a compelling but contested effort in mythmaking and propaganda.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Michelson			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Michelson			

MO3047 The Tudors: Power and Piety in Sixteenth-Century England				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
The Tudors are the most famous dynasty in English history, containing the striking personalities of Henry VIII and Elizabeth I, and ruling over the turbulence of repeated changes of religion from Catholicism to Protestantism and back again. In this module we will explore the structures of power inherent in sixteenth century English government and the dynamics of personal monarchy. How these adapted to the novel conditions of the rule of a boy king (Edward VI) and two queens (Mary I and Elizabeth) will involve discussion both of political practice and ideas about and cultures of rule. The English Reformations will also be analysed to show how politics and religion affected each other. The final class will consider the post-1603 image of the Tudors and their legacy in political and popular history.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3045, MO3908			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr J Rose			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Rose			

## History - Honours Level - 2014/15 - August 2014

MO3048 Witches and Witch-hunting in Early Modern Europe				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module will investigate the ways in which the 'witch' became a culturally significant figure in continental Europe between the fourteenth and seventeenth centuries, the object of intense legal, religious, political and cultural scrutiny and debate. Drawing on material from Germany, France, Italy and England the course will explain how and why the early modern period witnessed a 'witchcraze', a period of unprecedented persecution. It will ask how ideas about witchcraft and magic were shaped by the religious, social and political upheavals of the period. Throughout, it will draw on a wide variety of primary source material, both textual and visual.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr B Heal			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Heal			

MO3049 Political Thought From Machiavelli to Tocqueville				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module will provide in depth study of particular figures both major and minor in the history of early modern to modern political thought in Europe, and a sense of some of the most significant contexts through which to understand political writings at a time of near-constant political, religious and economic upheaval. The focus of the course will be the long eighteenth century because it was during this period that longstanding controversy came to a head about empire, forms of government, sciences of human endeavour and morals more especially, commercial society, public credit, the possibility of perpetual peace, and the existence of nation states. The course begins with Machiavelli's call for an 'empire for increase' modelled on that of Ancient Rome, and ends with Tocqueville's claim that the future for all European states could be discerned from the development of equality in North America.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Prof R Whatmore			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Whatmore			

<b>MO3063 Pirates and Privateers in Early Modern Scottish History</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module explores the engagement of Scots in combating and participating in piratical and privateering activities in the Early Modern Period. The module follows the development of armed maritime forces as the nation pondered the abject failure of the Scottish regular army and the futility of employing capital ships such as the Great Michael. The resulting armed merchantmen were employed in times of war to great effect, for example doubling the size of the Scottish merchant fleet through the capture of Dutch ships in the second Anglo-Dutch war alone. When not employed by the government many headed out of European waters to put their privateering skills to use for personal gain resulting in some of history's most notorious pirates.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof S Murdoch			
<b>Lecturer(s)/Tutor(s):</b>	Prof S Murdoch			

<b>MO3080 Nomadic Heritage and Persianate Culture: The Iranian World from the Timurids to the Safavids (1370 - 1722)</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>Between the Middle Ages and the modern period, the Middle East was dominated by dynasties of Turkish origins. Militarily supported by Turkish tribesmen, often seeking legitimacy in the political ideals of the great nomadic conquerors of the 13th-14th centuries, these dynasties also patronised a renaissance of Persian culture, and the greatest of them, the Safavids, laid the foundations for the modern Iranian state. This module investigates how the Iranian world - including central Asia and eastern Anatolia - was shaped by these Turkic dynasties, especially the Timurids and Safavids, and the interplay of different cultural and ethnic forces that shaped the early modern Middle East. The course will make extensive use of the primary sources in English translation as well as the secondary literature.</p>				
<b>Programme module type:</b>	Optional modules for History, Mediaeval History, Mediaeval Studies, Middle East Studies, Modern History			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Mr A Bdaiwi			
<b>Lecturer(s)/Tutor(s):</b>	Mr A Bdaiwi			

## History - Honours Level - 2014/15 - August 2014

MO3081 The Classical Ottoman Empire			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>		
This module studies the development and culture of the 'classical' Ottoman Empire, from its definitive establishment in the middle of the fifteenth century into the seventeenth century. Themes include Ottoman expansion in Europe and the Middle East; centralisation and its discontents; relations with neighbours, such as Safavid Iran, the Habsburg Empire, and the Portuguese in the Indian Ocean; and Ottoman attitudes toward their empire and the wider world. In addition to knowledge of important historical events, this module aims to provide an introduction to the culture and social composition of the empire in the period under examination.			
<b>Programme module type:</b>	Optional for History, Mediaeval History, Mediaeval History and Archaeology, Mediaeval Studies, Middle East Studies, Modern History and BA (Intl Hons) History.		
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser		
<b>Anti-requisite(s):</b>	ME3610		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr D Kastritsis		
<b>Lecturer(s)/Tutor(s):</b>	Dr D Kastritsis		

MO3113 Stuart Rule and Revolution (1603 - 1689)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>In the seventeenth century, the British Isles witnessed widespread instability with two monarchs being overthrown; one executed, and one sent into exile after only three years on the throne. Abhorrent policies including novel forms of taxation and unpopular foreign warfare, implemented by court favourites and flawed monarchs all contributed to the breakdown of government. Religious tensions between groups with widely differing visions of the church further fuelled conflict, as did competing ideologies of government. The Stuart century also included some novel experiences, such as the first period of religious toleration in the 1650s and the growth of party culture and the 'public sphere' from the 1670s onwards. This module examines these developments, evaluating competing explanations for the Civil Wars of the 1640s and Revolution of 1688, using a variety of historical approaches and some contemporary documents. As the module includes awareness of British and Irish as well as English history, it complements and provides context for the latter part of module MO3166 which focuses more sharply on debates on British union.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3045			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr J Rose			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Rose			

MO3214 The Decline and Fall of the French Old Regime (1715 - 1789)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>Eighteenth-century France was the cultural leader of Europe, but mounting domestic difficulties made its efforts to remain the arbiter of power on the continent increasingly difficult to sustain. At home the absolute monarchy had great difficulty in adjusting to changing political, social and cultural expectations that would eventually engulf the Bourbon state as its international adventures produced financial bankruptcy. This module will explore France in the reigns of Louis XV and Louis XVI in order to understand the nature of old regime state and society, and the difficulties under which its people and rulers laboured. It will also give students the opportunity to engage with one of the most controversial subjects in European history: the origins of the French Revolution.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Rowlands			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Rowlands			

## History - Honours Level - 2014/15 - August 2014

MO3218 The American Revolution				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>The first of a number of late eighteenth century uprisings overturning powerful monarchies, the American Revolution brought about the demise of Britain's first empire and resulted in the writing of the Constitution and the establishment of democratic government. This module will focus on the forty years after 1763, examining the reasons why Americans sought to free themselves from British rule, the experience of Revolutionary War, and the problems faced by those who made it their task to design a new form of government for the United States. As well as telling the story of the elite rulers who were at the forefront of the rebellion, the module will also explore the experiences of everyday Americans during these decades of tumultuous social and political change.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Hart			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Hart			

MO3222 French Fancy and Cool Britannia? Franco-British relations from the Seven Years' War to the French Revolution				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module examines the relationship between France, Britain, and their empires, from c. 1750 until 1789. Franco-British relations in this period have been widely assumed to be wholly belligerent and antagonistic: the two nations were, after all, direct competitors for markets, colonial possessions and prestige. But how accurate is this construction? Were Franco-British relations consistently characterised by competitive warmongering, confrontation, and distrust? This course investigates the extent and nature of contact between the two countries, and asks how such interactions affected France's economy, culture and national identity. We study the waxing and waning of France's empire and the impact of British competition on France's economic and industrial development. We then delve into the cultural and intellectual exchanges between the two countries, asking how ideas and cultural artefacts circulated (or failed to circulate) across the Channel, and what impact this had on French culture and society.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Easterby-Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Easterby-Smith			



MO3223 South Asia and the European Encounter (c. 1700 - 1857)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>The eighteenth century in South Asia was a period of change and transformation which was shaped on the one hand, by the decline of the Mughal Empire, and on the other, by the growth of European trade with India. This course will focus on this transition from Mughal rule to 'Company Raj'. It will examine the trajectories of European interaction with India and seek to explain how and why the English East India Company became so powerful and influential in South Asia. By focusing on the early years of the 'Company Raj' this course will also explore the ways in which South Asian society and polity changed under early colonial rule.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 5%, Coursework = 35%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A Yechury			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Yechury			

MO3263 British Culture in the Eighteenth Century				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.standrews.ac.uk/history/infoug/ugtimetable">http://www.standrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module examines British culture in the eighteenth century. It introduces some of the leading cultural personalities of the age (Johnson and Boswell, Hogarth, Burke, Gibbon, Reynolds, Addison, Wollstonecraft, Paine) and gives students an opportunity to explore some of their most important works. Particular attention will be paid to the dynamic relationship between key trends in British cultural and intellectual life—including the fate of classicism, the rise of the novel, the growth of print media, the yearning for scientific knowledge, the spread of Enlightenment and the progress of radical political ideas—and broader processes in the period such as urbanisation, industrialisation, class tensions, empire, and changes in gender relations and perceptions of national identity.</p>				
<b>Programme module type:</b>	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr D Allan			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Allan			

## History - Honours Level - 2014/15 - August 2014

MO3302 Imperial Russia 1815 - 1917			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>		
The decline of Imperial Russia is analysed from the defeat of Napoleon, through attempts at reform, the rise of the Bolsheviks and other opposition movements, to the collapse of Tsarism in February 1917. In addition to the study of underlying political, economic and social factors, intellectual and ideological developments are examined. Aspects of foreign policy are also considered.			
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.		
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr F Nethercott		
<b>Lecturer(s)/Tutor(s):</b>	Dr F Nethercott		

MO3318 Revolutions, Nationalism and Reaction: 1848-1849 in the German Lands			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>		
contemporaries called it the 'Crazy Year'. After decades of governmental oppression, the revolutions of 1848 threw Germany into an intoxicating period of liberty and change. German society underwent a process of political mobilisation. Peasants, craftsmen, workers, liberals, radicals, nationalists, Catholics, Protestants, Jews, even women and proto-imperialists set about addressing their grievances. In order to establish new rights and institutions they utilised a wide spectrum of political means, ranging from riots to elected constituent assemblies. Their objectives were similarly heterogeneous. Peasants near Magdeburg demanded more pasture for their geese; the deputies of the Frankfurt Parliament tried to create a constitutional nation state. This module will try to draw an analytical portrait of the origins, events and consequences of seventeen dazzling, dramatic, momentous months in German history.			
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.		
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 20%, Practical Examinations = 0%, Coursework = 80%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Prof F L Muller		
<b>Lecturer(s)/Tutor(s):</b>	Prof F L Muller		

MO3320 Imperialism and Nationalism: The British Empire in India 1857 - 1947				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module will focus on "the Jewel in the Crown" - Britain's empire in India. The aim is to provide both an overall view and understanding of the development of the Raj as well as more in-depth knowledge and appreciation of select key issues, events and personalities. The Years of direct British rule from 1858 to Independence in 1947 with the partition of the sub-continent into India and Pakistan, will be studied through an examination of rebellion and revolt in the mid 19th century, consolidation of imperial power through strategies of coercion and collaboration, the rise and growth of an Indian nationalist movement from the late 19th century; the impact of two World Wars, economic costs and benefits of empire, the role of Gandhi and the ideology of non-violent protest, religion and politics - the growth of Muslim separatism and the trauma and bloodshed of Partition.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly lecture and seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C Kaul			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Kaul			

MO3321 Russia - Real and Imagined: Ideas, Identity, and Culture (1800 - 2000)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>Situated on the borders of Europe and Asia, Russia has always been an enigma for Western observers and scholars, by turns inspiring admiration as the exotic 'other', and discomfort as the untamed brutish bear. Yet, this conflicting 'sacred/profane' image has been as much a part of intellectual rhetoric in Russia itself, as it has been the cause for divided opinion abroad. As Russian intellectuals thought about their country's cultural (and spiritual) development, past and present, they often did so 'under Western eyes'. Whether critical or indulgent, their views testify to complex inter-relations with European neighbours. With this in mind, we shall explore a number of leitmotifs in Russian intellectual culture, together with the contexts in which these were first elaborated. In addition, we shall identify instances of their recurrence as a 'resource' in late and post-Soviet endeavours to re-articulate the 'authentic' nature of Russian culture.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr F Nethercott			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Nethercott			

## History - Honours Level - 2014/15 - August 2014

MO3329 The Kaiser: Aspects of Emperor Wilhelm II (1859 - 1941)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>Revered as the 'modern central person' or described as simply insane, Germany's Kaiser Wilhelm II (1859 - 1941) played a central and highly visible role on the European political stage. Over the last 25 years the fascination this mercurial and deeply problematic ruler held for his contemporaries has been echoed by a large body of sophisticated historical scholarship. Focusing on Wilhelm's personality and his politics as well as on the context and structure of his reign, historians have explored the importance of key issues such as psychological trauma, disease, media, publicity, scandal, monarchical networks, modern kingship and political culture. This module will examine selected aspects of the life of Wilhelm II in order to arrive at an analytical evaluation of this individual and his impact as well as of the wider political and cultural world which he inhabited.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 16%, Coursework = 24%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof F L Muller			
<b>Lecturer(s)/Tutor(s):</b>	Prof F L Muller			

MO3332 Nation Building in North Central Europe (1795 - 1939)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>The Commonwealth of the Kingdom of Poland and the Grand Duchy of Lithuania (or Poland-Lithuania in shorthand), which was erased from the political map of Europe in the late 18th century, is commonly presented in Polish and international historiography as an early Poland. It was not. In the 19th century, ethno-national movements of Belarusians, Latvians, Lithuanians, Poles and Ukrainians emerged from the defunct polity's territory and inhabitants. During the subsequent century they secured separate states for their postulated nations. Likewise, Poland-Lithuania's Jews decisively contributed to the creation of Israel in 1948. Furthermore, in the cracks between the nation-states of the successful nations, the fortunes of the now by and large forgotten ethnic groups of Baltic Germans, Goralians, Kashubs, Latgallians, Mazurs, Poleshuks, Rusyns, Samogitians, Tatars and Varmiaks have waxed and waned. It is necessary to take account of Poland-Lithuania and its multi-ethnic and multi-linguistic legacy in order to achieve a considered understanding of the development of Central and Eastern European history during the last two centuries.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr T D Kamusella			
<b>Lecturer(s)/Tutor(s):</b>	Dr T D Kamusella			

MO3333 Nationalism and Language in Central Europe				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
Language was the ideological and practical basis for the emergence of national movements in Central Europe in the nineteenth century, and for the subsequent creation of nation-states in the region during the following century. This is often acknowledged but rarely explored. This module will investigate the process of making ethnolinguistic nations and their polities, the ideological and political underpinnings of this process, and their social ramifications in a comparative and interdisciplinary framework, over the time-span running from the Napoleonic Wars to the breakup of Yugoslavia. The significance of ethnolinguistic nationalism for the current situation in the region and for the situation in present-day Belgium, Northern Ireland and Spain will also be discussed.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr T D Kamusella			
<b>Lecturer(s)/Tutor(s):</b>	Dr T D Kamusella			

MO3334 Nature and Society in Victorian Britain				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
For Romantic poets and natural scientists, Christian missionaries and package tourists, the natural world was a source of inspiration and fascination. This module examines the ways the Victorians encountered and interpreted the natural world. Key themes include: natural theology, Romanticism, imperial exploration and discovery, the growth of tourism and the emergence of science as an expert profession. Students will use contemporary documents to examine the ways in which different social and professional groups constructed and represented the natural world according to their own interests.				
<b>Programme module type:</b>	Optional for History, Modern History, BA (Intl Hons) History and Sustainable Development.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, 1 hour online discussion, and 1 office hour.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Fyfe			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Fyfe			

## History - Honours Level - 2014/15 - August 2014

MO3335 The Japanese Empire and its Aftermath (1873 - 1952)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module traces the history and contradictions of Japan's empire from the first debate over how to "punish" Korea in 1873 and through to consider the early postwar aftermath of Japanese defeat in 1945. We will compare Japanese colonialism in Taiwan, Korea and Okinawa to that of Western empires, the important role of the Sino-Japanese war, and the development of nationalist and pan-Asian ideals.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 15%, Coursework = 45%			
	<b>As used by St Andrews:</b> Take-Home Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr K Lawson			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Lawson			

MO3337 China's Revolutions (1850 - 1989)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module traces the modern history of China through the lens of its most transformative political and social changes. It begins with the momentous and transformative rebellions that shook the Qing dynasty to its roots and concludes with the 1989 democracy movement that centered on Tian'anmen square in Beijing. We will examine the ways in which China's revolutions connected themselves with the past in a process that generated a long and rich revolutionary tradition. We will address the issue of identifying revolutionary agency and the social and economic forces that help drive the most violent transformations of China's past two centuries.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 15%, Coursework = 45%			
	<b>As used by St Andrews:</b> Take-Home Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr K Lawson			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Lawson			

MO3338 Disease and the Environment (c. 1500 - 2000)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>Before they are members of political and religious groupings, humans are biological entities. As such, throughout history humans have had to devise complex strategies to cope with fundamental biological factors. Focusing primarily upon an Anglo-American context, this module examines the manner in which sickness and death have shaped human history - both biologically and culturally - over the past 500 years. Consideration of patients' and practitioners' expectations, and of the changing meanings of cure, treatment, and care, encourages students to appreciate changing attitudes to health, hygiene, healing and illness within the social history of medicine. Moreover, through an examination of medical practitioners, hospitals, quarantine, inoculation, imperialism, urbanisation, and industrialisation, students will gain an appreciation of the historical relationships between the environment and disease.</p>				
<b>Programme module type:</b>	Optional for History, Modern History, BA (Intl Hons) History and Sustainable Development.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3023			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr J F M Clark			
<b>Lecturer(s)/Tutor(s):</b>	Dr J F M Clark			

MO3346 Politics, Culture and Society in the French Revolution (1789-1815)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>Reading is a skill that most of us take for granted, yet it gives us access to an amazing breadth of information and entertainment. This module examines the emergence of a mass reading culture in Britain in the long nineteenth century. It considers the rise of literacy and education, and the provision of cheaper forms of printed matter. It investigates the roles of authors, editors, publishers and booksellers in bringing print to the new reading public. As well as using printed and online secondary material critically to summarise and critically evaluate scholarly arguments about the history of the book, students will also have the opportunity to do hands-on research with original printed primary material and to learn about how books and magazines were made.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3221			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S Easterby-Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Easterby-Smith			

## History - Honours Level - 2014/15 - August 2014

MO3349 The American Metropolis			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>		
<p>The United States is home to some of the most iconic, the largest, and the most violent, cities in the world, and this module traces their fortunes from foundation to the present. British America's towns began as small villages inhabited by a few intrepid settlers. By 1783, however, some towns had matured to become the site of the Declaration of Independence and the penning of the Constitution. Throughout the nineteenth century, rapidly growing cities continued to be at the cutting edge of the forging of the American nation. Looking at issues such as industrialization, immigration, the gold rush and the settlement of the west, crime and, finally, the process of "white flight" to the suburbs, the module will explore the distinctive and colourful story of urban life in the United States.</p>			
<b>Programme module type:</b>	Optional for History, Modern History, and BA (Intl Hons) History.		
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser		
<b>Anti-requisite(s):</b>	MO3713		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr E Hart		
<b>Lecturer(s)/Tutor(s):</b>	Dr E Hart		

MO3351 Doing and Practicing Transnational and Global History in the Late Modern World			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	<a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable.html">http://www.st-andrews.ac.uk/history/infoug/ugtimetable.html</a>		
<p>Over the past ten years transnational and global history have emerged as some of the most vibrant fields in late modern history. With their interest in cross-border activities, with their focus on the flow and interconnection of ideas and goods and their transformation between different cultural and national contexts, with their emphasis on people on the move who create nodes between cultures, both transnational and global history very much reflect the world we live in.</p> <p>The team-taught module provides an entry point to the field of transnational history, its approaches and tools. It is deliberately designed to be open and flexible as it seeks to allow students to take ownership of the content and the cases to be studied. Following an introduction to the field along a series of text based seminars, the module is mainly designed around a number of workshops and training sessions that will equip students with the skills to analyse, map and visualise transnational histories - that is "doing" and "practicing".</p>			
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.		
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar (x 8 weeks), 2-hour practical classes (x 3 weeks), 1 office hour (x 11 weeks)		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%		
	<b>As used by St Andrews:</b> Coursework (including presentation) = 100%		
<b>Module Co-ordinator:</b>	Dr K Lawson and Dr B Struck		
<b>Lecturer(s)/Tutor(s):</b>	Dr K Lawson, Dr B Struck		



MO3352 Migrant South Asia (c. 17th-20th centuries)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module will focus on the social and cultural history of migration from South Asia from the 17th to the 20th centuries. It will examine the different motivations for migration such as trade, labour recruitment, education and assess how colonial rule and structures of the British Empire affected these migrant trajectories. It will also look at how the memories of South Asia and nostalgia shaped diasporic lives. A trans-national approach to these questions will enable the students to compare the collective experiences of different migrant groups from the plantations of Trinidad and Fiji to the commercial centres of London and New York.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	<b>As used by St Andrews:</b> Coursework (including presentation) = 100%			
<b>Module Co-ordinator:</b>	Dr A Yechury			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Yechury			

MO3360 The Weaker Sex? Women and Scottish Society 1800 - 1970				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module examines, through the lives of ten prominent women, gender issues in nineteenth and twentieth-century Scotland. Each of the lives illustrates the struggles that women faced to achieve equal rights and equal opportunities in Scottish society. The women chosen are from a wide spectrum of society, from weavers to duchesses, and include: Mary Slessor, missionary, Duchess of Atholl, politician, Sophia Jex-Blake, doctor, among others.				
<b>Programme module type:</b>	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr W W Knox			
<b>Lecturer(s)/Tutor(s):</b>	Dr W W Knox			

## History - Honours Level - 2014/15 - August 2014

MO3361 Scottish Social Problems 1800 - 1990				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module examines the reasons behind the persistence of major social problems in a society which has grown immeasurably in wealth and prosperity since 1800. Major topics to be examined include housing, poverty, sectarianism and the responses of government and society to all of these.				
<b>Programme module type:</b>	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	SC3043			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr W W Knox			
<b>Lecturer(s)/Tutor(s):</b>	Dr W W Knox			

MO3381 French Algeria (1830-1962)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
Between the conquest of 1830 and independence in 1962, Algeria was the figurehead of the French empire and a breeding ground for the theories and practices of colonialism that were implemented elsewhere. This module examines French and Algerian experience in colonial Algeria, considering the initial process of pacification, Algerian resistance, French colonial doctrines, French views of the Algerians, the emergence of anticolonial nationalism, the struggle for liberation. The War of Independence, a major political and social crisis with lasting effects on contemporary France and Algeria, will be studied in detail, and the module will also address the legacy of colonialism in both nations.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3322, MO3336			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Tyre			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Tyre			

<b>MO3385 Modern Iran since 1834: Reform and Revolution</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
This module looks at developments in Iranian history from the 19th century to the present with particular reference to the impact of the West. The module will assess the various attempts at reform and the consequences of revolution in a country which is proving to be a major regional and international actor in the 21st century. The module will look at the way in which imperial decline has been managed with a view to reversing an restoring Iran's fortunes as a Great Power. Particular attention will be given to political development. The growth of the modern state and the emergence of nationalism and political Islam.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Anti-requisite(s):</b>	MO3327			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof A M Ansari			
<b>Lecturer(s)/Tutor(s):</b>	Prof A M Ansari			

<b>MO3410 The Third Reich: History and Historiography</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
Scrutinising primary sources and drawing on a wide range of literature, this module will critically analyse the contested nature of the Third Reich. It will discuss the main facets of Nazi domestic policy, comprising political, social, economic and cultural developments. Strong emphasis will be laid on historiographical issues like the debate on the German Sonderweg or the nature of Hitler's rule. Against the background of the empirical findings discussed in the module, various labels will have been attached to the Third Reich, such as 'fascism', 'totalitarian dictatorship', 'political religion', 'atavistic' or 'modern tyranny' will be examined.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 12%, Coursework = 28%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Bavaj			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Bavaj			

## History - Honours Level - 2014/15 - August 2014

MO3421 Making People's Music: Folk Music Revival and Society in the United States (1900 - 1970)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module explores the development of the relationship between folk music revival and wider society in the twentieth century United States. During the late 1950s and early 1960s, folk music attained an unprecedented level of popularity in the US, particularly among politically active young people. As it became the ideal medium through which to express the desire for social change and ideals of community and solidarity, a new generation of perceptive songwriters - including Tom Paxton, Joan Baez and Bob Dylan - became vital spokespeople for their generation. The module aims, through use of primary texts, films and music, to examine and to evaluate this movement from its roots to its legacy.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 27%, Coursework = 13%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G A M Mitchell			
<b>Lecturer(s)/Tutor(s):</b>	Dr G A M Mitchell			

MO3422 The United States in Depression and War (1929 - 1945)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module examines the United States during the turbulent and difficult 1929-1945 period, with a particular emphasis on society, culture and politics. These to be examined include the Wall Street Crash and its immediate impact; the presidency of Franklin Roosevelt; impact of Depression and War on women and minorities and on the regions of the United States; the New Deal and its consequences' the art and culture' isolationism and the road to war; the Home Front and life for the forces during World War II; and the impact of this era on society as a whole.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G A M Mitchell			
<b>Lecturer(s)/Tutor(s):</b>	Dr G A M Mitchell			

**MO3423 Dictatorship in Practice: Everyday Life in Fascist Italy, Nazi Germany, Franco's Spain and the Stalinist Soviet Union.**

<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module explores the 'lived experience' of dictatorship in Fascist Italy, Nazi Germany, Franco's Spain and the Stalinist Soviet Union. As such the module provides an introduction to the historiographical and conceptual approaches and empirical research surrounding the history of everyday life, an area of historical study which has gained increasing importance over recent decades. It also permits detailed insight into social and cultural policies and practices within the major European dictatorships of the mid-twentieth century. Our aim is to reveal how far these regimes succeeded in penetrating and appropriating the daily practices and 'private' worlds of the individuals they governed, as well as to note the complexities of 'ordinary' people's lived experience of dictatorship and their responses to the intrusion of the regime and its cultural products into their day-to-day lives.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr N Papadogiannis			
<b>Lecturer(s)/Tutor(s):</b>	Dr N Papadogiannis			

**MO3508 America and Vietnam**

<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>America's involvement in Vietnam will be examined in the widest possible sense. Topics will include the reasons for the intervention, the nature of the war, the effect on American Cold War foreign policy and the reasons for the American defeat. The course will also study the effects of the war on the culture of the 1960s and the enduring legacy of the Vietnam experience.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof G De Groot			
<b>Lecturer(s)/Tutor(s):</b>	Prof G De Groot			

## History - Honours Level - 2014/15 - August 2014

MO3513 Heavenly Decade: The 1960s				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>This module will concern itself with the 'Sixties experience' as a worldwide phenomenon. The culture of 'sex, drugs and rock and roll' affected youth around the world. Social conventions were torn down in the frenzied obsession with rebellion and the 'counterculture'. But there was also a majority who neither tuned in, turned on, nor dropped out - youths who deplored the drug culture, held sex sacred, and preferred the Beatles to the Rolling Stones. The module will examine the links between countercultural movements in Berkeley, Berlin, Paris, Mexico City and elsewhere. Due primarily to the availability of sources the module will have an American bias, but there will be sufficient exploration of youth movements in other countries to provide an illuminating cross-cultural perspective. The module will also explore whether the heavenly decade was mainly myth, important more in retrospect than at the time.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Torrubia			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Torrubia			

MO3520 History, Memory and Identity in Postwar Western Europe (1945 - 2005)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
<p>As Gabriel Almond and Sidney Verba put it in their highly influential study on The Civic Culture, the political culture of a nation is 'the particular distribution of patterns of orientation towards political objects among the members of the nation'. Which 'patterns of orientation', i.e. attitudes, basic beliefs and values, can be discerned in postwar European democracies? This is the basic question of this module. By taking the intriguing historiographical triangle of history, memory and identity as a heuristic starting point, the module aims at examining the different ways of coping with recent pasts in Germany, Italy, France and Britain. This allows revealing insights in various historical narratives and streams of political thought in postwar Europe, hence in crucial aspects of Western European political culture between 1945 and 2005.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Bavaj			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Bavaj			

MO3523 Postcolonial Europe: Empire and its Legacies in Western Europe since 1945				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	See <a href="http://www.st-andrews.ac.uk/history/infoug/ugtimetable">http://www.st-andrews.ac.uk/history/infoug/ugtimetable</a>			
What did empire mean to Europeans in the twentieth century, and in what ways have colonialism and its legacies shaped the history of Europe since the end of formal imperial rule between 1945 and 1980? This module looks at postwar Western Europe through an imperial lens, applying new perspectives from the field of postcolonial studies. The module covers three main themes: the question of what empire and its loss meant to the colonisers; migration from former colonies to Europe and its consequences; and the memory, representation and historiography of empire. Focusing mainly on Britain and France but also looking at Belgian, Dutch and Portuguese examples, the module uses a wide range of sources and approaches to explore cultural, social and political aspects of post-colonial Europe.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Pre-requisite(s):</b>	Permission of the History Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	<b>As used by St Andrews:</b> Take-Home Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Tyre			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Tyre			

MO4804 Work and Politics in Modern Scotland				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	9.30 am - 12.30 pm Wed			
The module has two specific purposes: firstly, to provide an account of the Scottish Labour Movement from the early nineteenth century, and the ways in which economic and social change have conditioned its development; and, secondly, to relate these developments to wider debates within the social sciences regarding the relationship between work and politics.				
<b>Programme module type:</b>	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 6%, Coursework = 34%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr W W Knox			
<b>Lecturer(s)/Tutor(s):</b>	Dr W W Knox			

## History - Honours Level - 2014/15 - August 2014

MO4806 Britain and the Thirty Years' War (1618 - 1648)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	9.30 am - 12.30 pm Wed			
<p>This module explores the wider issues raised by the entanglement of Scotland in the Thirty Years' War, 1618-1648, covering both the diplomatic and military aspects of the conflict. The module illuminates the political processes that led to the participation of as many as 50,000 Scottish troops in the war that took place at the heart of the Holy Roman Empire initially through loyalty to the Scottish princess Elizabeth Stuart, wife of Frederick V of the Palatinate. The module covers the official alliances of the Stuart regime, the independent diplomacy of the Scottish parliament and the actions of numerous influential Scots involved with the combatant nations.</p>				
<b>Programme module type:</b>	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour meeting, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Prof S Murdoch			
<b>Lecturer(s)/Tutor(s):</b>	Prof S Murdoch			

MO4850 Britain and Iran in the Modern Era				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>This module will discuss and analyse the often intimate relationship between Iran and Britain in the modern period, focusing on the initial diplomatic contacts in the early 19th century when Britain sought an ally against Napoleon, to the apogee of British power and influence in Iran from the end of the 19th century until the nationalisation of the Anglo-Iranian Oil Company in 1951-53. The module will not only look at broader strategic aspects of the relationship, especially with growing British interests in India, but also analyse the growing economic relations between the two countries, as well as ideological and cultural developments, concluding with a discussion of the British conception of 'Persia'. English language documents will be used throughout the module.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Anti-requisite(s):</b>	MO4957			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof A M Ansari			
<b>Lecturer(s)/Tutor(s):</b>	Prof A M Ansari			



MO4904 Madness and its Social Milieu in Britain (1560 - 1820)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>Madness is a source of fascination and dread in the modern world. The period between the end of the middle ages and the early years of the nineteenth century is seen as particularly important in forming our attitudes: because of changing understandings of and attitudes to insanity; and because of new types of care such as the origins of the asylum movement. In addition, analysing perceptions of mad behaviour allows unique insights to be gained into the social and cultural priorities of the sane. The module will allow students to use original documents to examine British society from an unusual perspective and to gain unique insights into the mental world of early modern people. In addition to the skills of critical reading, and documentary analysis, it will encourage an interdisciplinary and comparative approach, and will introduce students to quantitative research methodologies.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof R A Houston			
<b>Lecturer(s)/Tutor(s):</b>	Prof R A Houston			

MO4912 French Absolutism: Richelieu to Louis XIV				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>This module studies the establishment of stability and the growth of the royal state in France during the period 1610-1715. It examines both the theory and the practice of absolute monarchy and the way such a system of governance related to the wider French society. From the late 1620s traditional mechanisms of government were gradually recast and replaced by more centralised methods of political, social and cultural control. However, the encroachment of the royal state upon civil society met with both popular and elite resistance that had to be either crushed or defused through compromise deals before stability could emerge under Louis XIV. Students will focus not only upon political and administrative history but also upon associated religious, social and cultural developments, such as the growth of the royal court, the influence of the counter-reformation, the emergence of educational and artistic academies, and changing attitudes towards personal and political conduct. French is not required.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2.5-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 77 hours		<b>Guided independent study:</b> 523 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Rowlands			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Rowlands			

## History - Honours Level - 2014/15 - August 2014

MO4913 Saints and Martyrs in Early Modern Europe				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>Saints and martyrs were a key part of devotional life during the Middle Ages. This module will begin by considering late-mediaeval devotion to the saints, focusing on popular practices such as pilgrimage, on hagiographical writing and on mysticism. We will then consider the attacks made on the cult of the saints during the Protestant Reformation and will assess what replaced the saints in popular consciousness. Finally, we will look at ideas of sainthood during the Catholic Reformation. What did it take to become a saint in the religiously divided Europe of the seventeenth century? Throughout we will consider case studies, from Margery Kempe to Teresa of Avila, and the course will make extensive use of visual as well as textual sources.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-Hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr B Heal			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Heal			

MO4932 Russians Making History (1755 - 2000)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>How did Russians write about their past? What conceptual tools did they use? What influenced their approaches, and privileged their choice of subject matter censorship, ideology, the latest philosophical fashions in Western Europe, the quest for truth? Was the Bolshevik Revolution a tabula rasa for historical knowledge, or just one of the more striking examples of the peculiar pendulum swings that have rocked Russia between revolution and reform throughout her entire history? The aim of this module, then, is twofold: to discover the works (and personalities) of a number of Russian historians active in the eighteenth, nineteenth, and twentieth centuries and, through their eyes as professionals or amateurs re-examine aspects of the Russian past.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr F Nethercott			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Nethercott			

MO4936 Bismarck: Biography - Politics - Mythology				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
A celebrated recent history of German accorded Otto von Bismarck almost biblical status. The book opens with a thunderous: 'In the beginning was Bismarck'. An opinion poll published by the 'Berlin Illustrated News' in 1899 declared him the greatest statesman of the century. This module aims to approach, understand and evaluate the life, career and personality of this alleged giant. Scrutinising a large selection of primary sources and drawing on a rich body of sophisticated secondary literature, we will try to appreciate Bismarck both as a shaper and a product of his time. Consideration will also be given to Bismarck's legacy in European and German politics as well as his role and function in the pantheon of Germany's political iconography.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 14%, Coursework = 26%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof F L Muller			
<b>Lecturer(s)/Tutor(s):</b>	Prof F L Muller			

MO4938 Progress and Reform: The United States (1880 - 1930)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	9.00 am - 12.00 noon Wed			
This module explores the period 1880 - 1930 in the United States - an era of dramatic changes and extensive social and political reform. It examines the period in an intensive, thematic manner; both primary and secondary material will be used to study such themes as Industrialisation, Immigration, the Southern States, Populism and Progressivism, Women and Gender, the Arts and Foreign Policy. The module will employ both textual and non-textual primary sources. Alongside more conventional types of historical document, photographs, film, artworks and music will also be used as a lens through which to view this period.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G A M Mitchell			
<b>Lecturer(s)/Tutor(s):</b>	Dr G A M Mitchell			

## History - Honours Level - 2014/15 - August 2014

MO4952 The Kennedy Years				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
This module will cover America in the 1960s, through the careers of John, Robert and Edward Kennedy, in the process demonstrating how the political landscape which brought John Kennedy to the White House in 1961 was destroyed by 1969.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof G De Groot			
<b>Lecturer(s)/Tutor(s):</b>	Prof G De Groot			

MO4962 France and its Empire in the Twentieth Century: Colonialism, Anti-colonialism, Post-colonialism				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	10.00 am - 1.00 pm Wed			
In 1918, the French colonial empire was at its zenith. Yet the next fifty years were characterized by imperial decline and conflict, as the certainties of the 'age of empire' were challenged. This module will examine the nature of French colonialism and challenges to imperial power, focusing mainly on the crucial period between 1918 and 1962. Questions that will be addressed include the role of ideology in French imperialism; the effects of imperialism on colonized societies; the ways in which imperial rule was challenged and undermined; the complex relationship between French republican ideals and imperialism; and the legacies of empire in the post-colonial era.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Tyre			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Tyre			

MO4965 Ethnic Cleansing and Genocide in Twentieth-Century Europe			
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	Wed am		
<p>During the last two centuries modernisation has placed in the hands of governments unprecedented instruments and resources with which they can effect ideologically justified and politically motivated changes in the populations of states. Serious attempts at mass expulsions and exterminations of entire populaces were first made in the 19th century in the colonies of the European powers. In Europe the phenomenon manifested itself during the 20th century, mainly in attempts to achieve a precise fit of nation-states with their ethnolinguistically defined nations. The massacres (genocide) of Armenians in the Ottoman Empire were followed by mass expulsions of other populations during and after World War I in Central Europe. World War II culminated in the genocide of the Jews and Roma, while after the war an even bigger wave of expulsions occurred. At approximately the same time, socially and nationally defined groups were exterminated or forcibly relocated within the Soviet Union. The internationally accepted conceptualisation and criminalisation of genocide in 1948 did not prevent renewed rounds of expulsions and attempted genocides in the second half of the 20th century in Central and Eastern Europe.</p>			
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.		
	<b>Scheduled learning:</b> 88 hours	<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%		
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr T D Kamusella		
<b>Lecturer(s)/Tutor(s):</b>	Dr T D Kamusella		

## History - Honours Level - 2014/15 - August 2014

MO4967 Elizabethan England: Politics, Religion, and Personalities (1558 - 1603)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>The popular image of Elizabethan England is of a successful regime gloriously triumphing over its enemies at home and abroad. But recent historians have instead depicted Elizabeth as an imperfect monarch who constantly obstructed and infuriated her political and ecclesiastical elite by refusing to marry, name an heir, or decisively reform the English Church. This Special Subject considers how power was negotiated, manipulated, exploited, and managed by Elizabeth and those around her. Integrating the political and religious history of the period, it examines courtiers, favourites, counsellors within and outwith the Privy Council, nobles, and bishops. The major questions of Elizabethan government – the best form of the church, the rule of a woman, the marriage of a queen regnant, and dynastic instability – will be examined to uncover who really held power. Primary sources studied range from contemporary printed works to records of the everyday workings of government, to court plays and the visual culture of rule.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Anti-requisite(s):</b>	MO4916			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 5%, Coursework = 65%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 30%, Coursework = 70%			
<b>Module Co-ordinator:</b>	Dr J Rose			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Rose			

MO4968 Curiosity, Empire and Science in Eighteenth-Century France				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>The world was shrinking in the eighteenth century. Overseas travel increased exponentially and societies and cultures were transformed on a global scale. This course examines how overseas exploration affected science and society in eighteenth-century Europe, focusing primarily on France and its empire. The history of collecting is central: travel and trade meant that an unprecedented quantity of outlandish objects and new information circulated the globe. This course uses textual, visual and material sources to examine the histories of French exploration and empire-building, popular curiosity and collecting, and the making of the modern museum. We will link these themes to broader narratives concerning the significant cultural, social and scientific changes that took place more generally in Enlightenment Europe: education and religion; economic and industrial development, empire and the making of modern science, to name just a few.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Easterby-Smith			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Easterby-Smith			

MO4970 Revolutions and Empires (1776 - 1848)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students on the second year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>In 1700 Europe was a patchwork of different kinds of states from absolute monarchies to free cities. During the eighteenth century the traditional survival strategies of the smaller states began to fail. The dark side of the enlightenment is the story of the decline and disappearance of so many of these small states. The revolutions that began in 1776 and were followed across Europe and beyond can all be seen as rebellions against empire. This module examines these revolutions and their consequences for the empires that they sought to limit or dismantle. The French Revolution, from being a cosmopolitan revolution to put an end to empire, turned into an attempt to create a global republican empire, and the course looks at the consequences of the Revolution for the ideals that sustained it. It goes on to examine the relationship between states after the Napoleonic Wars, and the consequences of the new forces of industrialism, socialism, utilitarianism, liberalism and democracy.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof R Whatmore			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Whatmore			

MO4971 The City in East and Southeast Asia c. 1850 - 1950				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
<p>This module explores the development of urban spaces in nineteenth- and twentieth-century East and South East Asia. It examines the economic, social, and political geographies of Asian cities in colonial, semi-colonial, and early post-colonial contexts as well as the way in which these cities and their residents are embedded in multiple local, regional, national, and transnational contexts. The first semester will allow students to work in depth with the rich digitized Shanghai Municipal Police Archive, and other English-language sources will include newspapers, diplomatic and trade archives, missionary and travel accounts, and some translated sources.</p>				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2 x Take-Home Examinations = 40%, Coursework (including presentations) = 60%			
<b>Module Co-ordinator:</b>	Dr K Lawson			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Lawson			

## History - Honours Level - 2014/15 - August 2014

MO4972 Understanding Resistance and Protest in Modern India ( c. 19th-21st Century)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students on the second year of the Honours Programme.			
<b>Planned timetable:</b>	Wed am			
Resistance and protest movements in India have taken different shapes and forms over the past few centuries. This module attempts to understand these protests using different categories of analysis: the countryside, urban labour, political protest, caste and gender. It will engage with different political ideologies and look at how colonialism, nationalism and independence affected and shaped the nature of protest movements in India. The students will read a wide range of primary sources including political pamphlets, government reports, contemporary narratives and oral history records. Ultimately, by locating tumultuous events within broader themes this module will give the students a long term perspective on some of the key socio-economic and political moments of post-colonial India.				
<b>Programme module type:</b>	Optional for History, Modern History and BA (Intl Hons) History.y			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar, plus 1 office hour.			
	<b>Scheduled learning:</b> 88 hours		<b>Guided independent study:</b> 512 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%			
	<b>As used by St Andrews:</b> 2 x 3-hour Written Examinations = 60%, Coursework (including presentation) = 40%			
<b>Module Co-ordinator:</b>	Dr A Yechury			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Yechury			



## School of International Relations

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### International Relations (IR) modules

IR3004 International Political Economy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Fri			
<p>This module will begin with an outline of the three major traditions of international political economy: liberalism, Marxism and nationalism, providing an explanation of their main ideas, as well as a critique. After a brief examination of some more contemporary theories, the module will go on to examine the politics of international trade, including an overview of the GATT system, and some topical trade issues. The module will examine the importance of multinational corporations in the world trading system, and will then go on to look at relations between North and South. The module will finish with the importance of regional economic groupings, some thoughts on the future international economic regime.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr W B Vlcek			
<b>Lecturer(s)/Tutor(s):</b>	Dr W B Vlcek			

## International Relations - Honours Level - 2014/15 - August 2014

IR3006 International Regimes and Organisations				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm Tue			
This module covers: regime theory and international relations; the rise of international organisation; international conference diplomacy and rise of multi-lateralism; the UN system and its growth after 1945; complex cases of multi-lateral diplomacy; politicisation and financial issues in the UN system, the post-cold War reform of the UN.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			

IR3008 International Terrorism				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Thu			
This module examines the concept of terrorism; problems of definition; nature and characteristics and relationships to other forms of violence; typology; political objectives, strategies and motivations; underlying causes of rise and decline of terrorism; dilemmas of democratic and international response; aviation terrorism; terrorism and diplomacy; the problem of state sponsorship and support; problems of international co-operation, including the use of diplomacy, international law and organisation, and police and intelligence measures.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr Singh			
<b>Lecturer(s)/Tutor(s):</b>	CSTPV staff			

## International Relations - Honours Level - 2014/15 - August 2014

IR3013 Modern Ideologies				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am Wed			
<p>The module aims at analysing modern ideologies and at establishing their relevance for theories of international relations. It examines the ideological assumptions on human nature and on the relationship between individual and society which lie behind different theories of international relations. The module deals with three related problems: a) the analysis of the concept of 'ideology'; b) the assessment of the contributions to the understanding of politics offered by Liberalism, Conservatism, Marxism, Fascism, Feminism and Ecologism; c) the investigation of the connections between classical ideologies and theories of international relations.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr Sutton			
<b>Lecturer(s)/Tutor(s):</b>	Dr Sutton			

IR3015 Religion, Politics and Democracy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am Wed			
<p>This module explores the relationship between religion and politics, focusing in particular on issues of religion, democracy and democratisation. To that end it will start by introducing social scientific theories relating to religion and society and, using particular cases, will raise the question of where religion belongs in increasingly secularised political orders. These cases will vary from year to year, but are likely to focus on issues relating to church and state in Europe, the impact of the Christian Right in the USA, the contribution of Catholicism to democratisation in Latin America and eastern Europe, the relationship of political Islam to democracy, the rise of 'electoral Islam' in countries such as Turkey, the special challenges posed to established democracies by growing religious pluralism, and the impact of Hindu nationalism on the nature of Indian democracy.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof J P Anderson			
<b>Lecturer(s)/Tutor(s):</b>	Prof J P Anderson			

## International Relations - Honours Level - 2014/15 - August 2014

IR3021 Case Studies in Conflict Analysis				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon Mon			
<p>This module provides students with an opportunity to work on case studies in conflict analysis, in which they develop the skills required to analyse the roots, dynamics, key actors and issues-areas in specific conflicts. They will be introduced to the theoretical frameworks contained within conflict analysis about definitions of conflict, perceptions, historical interpretations, political, social, cultural and economic dynamics, initiation and escalation, and then will be asked to choose and investigate a particular case study according to the different analytical frameworks associated with conflict analysis. Problems associated with researching conflict and violence will also be tackled. This will provide the basis for each student to engage in a detailed case study, chosen from a specific list of key cases.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr T Shepperd			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Shepperd			

IR3022 International Relations and International Law				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Wed			
<p>This module revolves around several questions, "is international law really 'law'?"; "do international law and norms matter?"; and "what are the interactions between international relations and international law in practice?" The readings first examine the state-centered approach of traditional international relations scholarship and much of international legal scholarship, and then examine international relations scholarship regarding the influence of norms and the development of institutions, with an eye to the role of constructivist literature. The module will turn to particularly contentious issue-areas, such as the concept of legitimacy in the international system; the "emerging right to democratic governance"; humanitarian intervention; changing conceptions of sovereignty in light of human rights jurisprudence in regional courts; the role of the International Court of Justice and international tribunals; and the proliferating practice of international criminal law.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr Oliviera			
<b>Lecturer(s)/Tutor(s):</b>	Dr Oliviera			

**International Relations - Honours Level - 2014/15 - August 2014**

<b>IR3023 US Foreign Policy: The Dilemmas of Empire</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	4.00 pm Mon			
The module will be descriptive, explanatory, and evaluative. The first week of class will be devoted to a brief survey of theories of foreign policy, focusing on a range of positivist and post-positivist debates. From that point onwards, theoretical debates will be subsumed into the various historical, constitutional and structural descriptions of how US foreign policy is formulated and executed. Throughout the module we will also explore various normative critiques of the conduct of US foreign policy.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr G Bailey			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Bailey			

<b>IR3024 US The Politics of Africa</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am Mon			
This module provides an introduction to the study of African politics. Contemporary Africa is complex and varied: the continent consists of around fifty states with very different histories, colonial experiences, economies, values, and social structures. The module reviews the social and historical context of contemporary political life, looking at the changes the continent has undergone since independence. It will examine and seek to understand the colonial legacy, the nature of the post-colonial state, society and its institutions, the nation-building projects and policies of these states and the movement towards democratisation and the continuation of authoritarian rule through "low intensity democracy".				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			

## International Relations - Honours Level - 2014/15 - August 2014

IR3025 International Security				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Wed			
This module provides a general overview of international security affairs using a variety of conceptual perspectives, ranging from orthodox realist and liberal approaches to more recent critical theories. It also covers traditional issues of security studies such as the offence-defence balance, alliance formation, and collective security, as well as the 'new security agenda' involving societal security, environment, public health, and related problems.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Hom			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Hom			

IR3026 Diplomacy and Conflict Intervention				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Tue			
This module will explore the changing nature of diplomacy as it relates to conflict intervention, including the differences between the old and the new diplomacy and the range of governmental and non-governmental actors in conflict intervention, from encouraging and facilitating dialogue to economic sanctions to monitoring human rights, to peacekeeping and peace-enforcement, to forums for addressing past injustice. These forms of intervention will be critically analysed against the background of globalisation.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr T Shepperd			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Shepperd			

## International Relations - Honours Level - 2014/15 - August 2014

IR3029 The Logic of Irregular Warfare				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Mon			
<p>The purpose of this module is to examine the dynamics of violence in three distinct forms of irregular armed conflict: civil wars, insurgencies and guerilla wars. Its starting point is that the twentieth century has witnessed a shift from traditional forms of warfare to these three distinct forms of irregular war and that this shift demands a reconsideration of the way that warfare is studied. Using theoretical approaches to the subject, as well as historical case studies, it will identify the dynamics of irregular warfare in the twentieth century, trace the diverse motivations and strategies implicit in different kinds of irregular warfare, and discuss the implications of this shift for those responsible for countering irregular warfare.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Scheipers			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Scheipers			

IR3030 Human Rights in Theory and Practice				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm Fri			
<p>This module introduces students to the complex debates concerning human rights, and in particular to the interrelationship between human rights in theory and in practice. While human rights is a powerful idea in our time, it is also the focus of numerous controversies. The module explores the philosophical foundations of universal human rights; the political, legal and historical development of modern human rights norms; issues and trends that have arisen since the advent of the United Nations human rights system; and the impact of human rights on the rules of international politics.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J P Hayden			
<b>Lecturer(s)/Tutor(s):</b>	Dr J P Hayden			

## International Relations - Honours Level - 2014/15 - August 2014

IR3031 Globalisation and the War on Terrorism				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm Fri			
<p>This inter-disciplinary module introduces students to various conceptual frameworks for thinking about the war on terror in an age of globalisation, along with a range of empirical case studies designed to illustrate these theoretical debates. A selection of readings is provided, ranging from international relations to other contributions from sociology, criminology, philosophy, history and political science. Theoretical issues examined include globalisation as a new security paradigm; the notion of a globalised War Risk society; the clash of civilisations vs. the continued relevance of realism; and re-defining what 'war' means in the war on terror. Case studies comprise NATO's transformation; war on Iraq; and emerging non-military attempts at global governance in controlling terrorism.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Kupatadze			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Kupatadze			

IR3039 International Relations of the European Union				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am Thu			
<p>This module examines the European Union (EU) from a variety of perspectives derived from major theories/concepts of international relations and comparative politics. It considers the EU as a key reference point in the foreign/security/defence policies of EU member states, as a major centre of gravity in Europe's regional neighbourhood, and as an important global actor. The module also considers the EU's relations with competing actors, particularly the U.S., NATO, Russia and China, as well as its role as a model for other experiments in regional integration.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			



## International Relations - Honours Level - 2014/15 - August 2014

IR3041 International Political Theory				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm Mon			
<p>This module introduces students to international political theory, or the use of ethical, political and legal theory to evaluate various international practices. Unlike IR theory, IPT is primarily normative in orientation, drawing on both the history of ideas and current political and ethical theory to give students tools for evaluating international affairs rather than simply explaining them. It addresses topics such as war, economics, environmental issues, law, and religion.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof A F Lang			
<b>Lecturer(s)/Tutor(s):</b>	Prof A F Lang			

IR3043 Approaches to Counter-Terrorism				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am or 3.00 pm - 5.00 pm Mon			
<p>This module will explore 'orthodox'/mainstream, critical, and peace studies approaches to counter-terrorism. Beginning with a case-study on the UK's responses to 'radical' Islamism and the prevalence of Islamophobia, the students will begin to evaluate the different approaches for effectiveness. The module will highlight that less considered counter-terrorism practices and procedures offer different perspectives and quite possible different results.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr C E Gentry			
<b>Lecturer(s)/Tutor(s):</b>	Dr C E Gentry			

## International Relations - Honours Level - 2014/15 - August 2014

IR3044 Pathways of European State Formation				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon Tue			
<p>The State is one of the most foundational units of analysis in International Relations, but where does it come from? This module explores the historical, and often violent, processes associated with the formation of the modern state in Europe, and the implications for the organisation of the economy and political society, as well as its impact for the larger development of the global political economy. Students will engage in how the creation of the state entails the parallel and commitment creation of categories into which bodies are designated, assigned, and condemned. The module begins with the transition from the mediaeval organisation of European society and concludes with an examination of the role of the state in facilitating and mediating the global economy.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Murer			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Murer			

IR3046 Foreign Policy of Modern China				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Mon			
<p>This module will provide an introduction to the major foreign policy issues and challenges facing the People's Republic of China in the post-cold war world. The primary focus will be on Beijing's evolving opening to the international system since 1949, from Maoist to post-Maoist and post-Dengist global linkages and cooperation. The module will also examine domestic actors in China's foreign policymaking, including the CCP and the People's Liberation Army, and the effects of China's economic development and reforms. Specific regional case studies will be discussed, including changing Sino-American relations and China's relations with the Asia-Pacific region.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006		<b>Anti-requisite(s):</b>	IR4528
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Coursework = 50%, Written Examination = 50%			
<b>Module Co-ordinator:</b>	Dr C Ogden			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Ogden			

## International Relations - Honours Level - 2014/15 - August 2014

IR3048 Peacekeeping and Humanitarian Intervention				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Tue or 1.00 pm - 3.00 pm Tue			
<p>The module is designed to offer students who have undertaken some previous study in the area of International Relations an introduction to the theories and concepts of international peacekeeping and armed humanitarian intervention. Although we explore peacekeeping as a phenomenon with a long historical lineage, we concentrate on its 'refinement' as an instrument of the United Nations in the period since 1945. The approach adopted is very much a political one - concerned with the international relations and diplomacy of conflict management. This is not a training course for conflict resolution on the ground, much less a military handbook.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr N MacQueen			
<b>Lecturer(s)/Tutor(s):</b>	Dr N MacQueen			

IR3049 International History and International Relations				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Tue			
<p>The study of international relations (IR) requires that students have an understanding of at least some of the literature and examples that are commonly used by international historians (IH). This necessity is due to the obvious historical roots of many of today's pressing problems in IR. This module will take a number of key themes (initially and for example), war, peace and empire, that have been often separately explored by IR and IH scholars and show how the two disciplines can reinforce and deepen the understanding of what we broadly call the 'international'. A series of case studies will be used, initially (and for example) that of the origins of the conflict in Palestine/ Israel; that of the origins of the Balkan conflicts of the 1990s, and; that of the roots of the decline of the British Empire in the period before, during and after the First World War. Each student will be expected to undertake historical research based on a use of secondary sources and also a study based on the use of primary, even archival sources.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof A J Williams			
<b>Lecturer(s)/Tutor(s):</b>	Prof A J Williams			

International Relations - Honours Level - 2014/15 - August 2014

IR3050 State, Power, Crime			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	10.00 am - 12.00 noon Tue		
<p>This module introduces students to the challenging and thought-provoking approaches of critical criminology and their application to key national and transnational issues in the modern global world in relation to states, power, and crime. It aims to develop a critical understanding of the nature of the state; the scale and type of crimes committed by state agents and agencies; the definitional processes involved in state's labelling acts as criminal; and the forces which explain why and how states enter into deviant or 'criminal' practices and omissions. A range of state crimes will be explored in both the domestic and international spheres as well as specific case studies pertinent to the topics explored. Module content includes crimes against humanity, crimes against nature, state-corporate crime, trafficking in human beings and asylum policy as state crime.</p>			
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations		
<b>Pre-requisite(s):</b>	IR2005 and IR2006		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.		
	<b>Scheduled learning:</b> 46 hours	<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Dr H Cameron		
<b>Lecturer(s)/Tutor(s):</b>	Dr H Cameron		

**International Relations - Honours Level - 2014/15 - August 2014**

<b>IR3052 The Politics of Violence and Resistance in Latin America</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Tue			
<p>This module analyses armed conflict and civil war, dictatorship and conflict transformation in the Latin American region. The module documents the conflicts of the twentieth century and seeks to understand to what degree they have been overcome or have evolved as a result of conflict transformation processes involving both national and international actors that accompanied regional democratisation. The module engages with theoretical approaches central to core subjects of international relations and political science, juxtaposing said theoretical analyses with discussions based upon comparative empirical research in the region. The module is of relevance to students interested in Latin America and in those conceptual frameworks relating to conflict and peace studies and introduces broader academic discussions relating to theories of conflict, peacebuilding, the State, social movements, democracy and human rights. The module will also provide instruments to those students interested in developing a career in public policy and policy-making in national and international institutions.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Brett			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Brett			

International Relations - Honours Level - 2014/15 - August 2014

IR3054 Mapping the Boundaries of Emerging and Evolving Securities			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	1.00 pm Mon		
<p>This module aims to explore how security is conceptualised within the disciplines of Critical Security and Geopolitical Studies. The point of departure is to explore how security is made and unmade through processes of interaction. Addressing this issue raises several important questions about where the boundaries of security begin and end. Does it matter if the boundaries between different spheres of interaction overlap and criss-cross? How do these points of intersection coexist and interact? How can we map the construction and implementation of security in zones of visibility and invisibility?</p> <p>Our aim is to take these questions forward by unpacking several separate yet interrelated security issues ranging from the environment to flags to migration to torture and the media, among others established and emerging scholarly debates. Overall the course argues that the boundaries of security are not just material objects. Instead they are conceptualised as sites of linguistic contestation that empowers and disempowers different modes of action. Taking this viewpoint challenges the idea that the boundaries are becoming redundant in an age of globalization. Mapping how we speak about security, and how this language is put into practice, forces us to acknowledge while boundaries are changing they remain important emblems and modalities of international relations.</p>			
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations		
<b>Pre-requisite(s):</b>	IR2005 and IR2006		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.		
	<b>Scheduled learning:</b> 46 hours	<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Dr F Donnelly		
<b>Lecturer(s)/Tutor(s):</b>	Dr F Donnelly		

## International Relations - Honours Level - 2014/15 - August 2014

IR3055 International Relations and the Internet				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm Thu			
<p>As a set of technologies, the Internet has played an enormous role in the development of trends which have been, in turn, transformative of international politics: globalisation, the emergence of new transnational political actors, the transformation of certain dynamics of war and conflict, and, potentially, in new revolutions and democratic transitions. Indeed, there is probably no area of contemporary international politics that has not, in some way, had to engage with the question of the transformative importance (or otherwise) of the Internet. Moreover, the Internet is itself governed by complex, contested, still remarkably ill-defined and sometimes unprecedented forms of global and international politics. The politics of the Internet – perhaps as much as the Internet itself – may be of great importance in shaping the way international relations works in the future. In this module, students will be offered an overview of the international politics of the Internet, and the implications of the Internet for international politics.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Mr G Ramsay			
<b>Lecturer(s)/Tutor(s):</b>	Mr G Ramsay			

## International Relations - Honours Level - 2014/15 - August 2014

IR3057 Armaments and International Relations			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	11.00 am Thu		
<p>The goal of this course is to introduce students to academic debates and theoretical frameworks that give insights into the impact of armaments (their development, characteristics and proliferation) on international relations. As IR scholars have long recognized, the availability of modern armaments is a key determinant of the international distribution of power. Some have even gone so far as argue that the technological characteristics of armaments fundamentally determines the nature of the international state system. Meanwhile, certain policymakers and NGOs contend that arms dynamics (e.g. arms races and the spread of light weapons) contribute directly to the outbreak of wars. This course will equip students with the analytic tools needed to critically examine both these issues and others.</p> <p>To accomplish this objective, the course will first (weeks 2-5) examine broad theories about how the development of distribution of armaments affects the international state system. Then, the course will focus (weeks 6-7) on the particular issue of whether the 'excessive' production and/or availability of armaments can cause wars. Finally, in the course's three last sessions (weeks 8-10), we will examine how contemporary phenomena—the globalization and Europeanization of arms production—are shaping this particular domain. Ultimately, the understanding that students will gain through this course will enhance their development as political scientists and their ability to work in fields as diverse as: government, NGOs, international organizations, and the corporate sector.</p>			
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations		
<b>Pre-requisite(s):</b>	IR2005 and IR2006		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.		
	<b>Scheduled learning:</b> 46 hours	<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Dr M DeVore		
<b>Lecturer(s)/Tutor(s):</b>	Dr M DeVore		



IR3058 Armed Forces, Societies and Governments: An International Perspective on Civil-Military Relations				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am Fri			
<p>This module introduces students to academic debates about relations between governments and military organisations. Armed forces are both essential to states' security, yet also pose a latent threat to governments. Indeed, many more governments are overthrown by military coups d'état than succumbed to foreign invasions. Consequently, governments in developing states face the challenge of ensuring themselves against the risk of military interventions in politics. While the menace of military interventions in politics hangs over developing states, even advanced industrial democracies face challenges in their civil-military relations.</p> <p>To shed light on these issues, we will first (weeks 1-2) examine the timeless questions of civil-military relations (through classic texts) as well as how the changing nature of military organizations over time. Then, we will focus (weeks 3-6) on debates about the impact of different modes of civil-military governance in developed states. Finally, in the four final sessions (weeks 7-10), we will examine civil-military relations in developing states, devoting particular attention to the causes and consequences of military coups d'état.)</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr M DeVore			
<b>Lecturer(s)/Tutor(s):</b>	Dr M DeVore			

## International Relations - Honours Level - 2014/15 - August 2014

IR3059 Anglo-American Relations Since 1939: The Special Relationship?				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm Mon			
<p>This module explains the coming together of the USA and Britain in the Second World War into what Churchill called a special relationship. Their defence, nuclear, economic and cultural relations from 1939 to the present will be examined both thematically/theoretically and historically. It will be demonstrated that the relationship cannot be explained solely in terms of common security interests (realism), or common values and sentiments (idealism), and that it challenges the norms of the existing sovereign nation-state system. If Anglo-American relations are indeed the special relationship, how do they differ from those with other nation states? What form has it taken over the years? Does it still exist?</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr G Bailey			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Bailey			

IR3060 Rebellion and Revolution (SUBJECT TO APPROVAL)				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	1.00 pm Thu			
<p>Rebellion is the most prevalent form of conflict in the contemporary world. Massive protests, insurgencies, and civil wars bring with them the potential for transformative revolutions. Rebellions, however, also risk widespread violence and destabilisation, resulting in immense destruction for the societies consumed by them. This module takes an historic, comparative approach to understanding the causes, processes and consequences of rebellions and revolutions as important social phenomena that have been experienced across every region in the world. We begin by examining the causes of rebellion, including theories of relative deprivation, economic rationality, moral economy, structural openings for revoltion and ethnic political exclusion. We then analyse the scholarly understandings of the dynamics of resistance.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr K Harkness			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Harkness			

## International Relations - Honours Level - 2014/15 - August 2014

IR3061 International Political Theology: Christian Realism and Beyond				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Tue			
<p>Situated within a recent reassessment of the relation between religion and international politics, this module is designed to investigate the theological dimension in international theory via an examination of Christian Realism and the Augustinian tradition in IR. In particular, the module revisits important theological moments in IR theory as exemplified in the work of Reinhold Niebuhr, Herbert Butterfield, Martin Wight and Hans Morgenthau and assesses the political theologies informing their thought. Finally, the module critically evaluates the recent revamping of political theology in international relations and examines the implications of recasting International Relations as a theo-political discourse for rethinking the global politics of religion.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr V Paipais			
<b>Lecturer(s)/Tutor(s):</b>	Dr V Paipais			

IR3062 The United Nations since 1945				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am - 12.00 noon Tue or 1.00 pm - 3.00 pm Tue			
<p>This module is designed to place the United Nations in the broader perspective of contemporary international relations and to guide students towards an understanding of both the impact and the limitations of the UN in the post-1945 international system. The module considers the possible locations of the United Nations in the relevant theories of international behaviour (realism, liberalism etc.). In doing so, it explores the crucial interplay between state-level national interests and multilateral cooperation through global organisation, and the extent to which the United Nations can be considered a supranational as opposed to a strictly inter-governmental organisation. In pursuit of this the module explores the range of UN activities covering international law, development, the environment and global security.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr N MacQueen			
<b>Lecturer(s)/Tutor(s):</b>	Dr N MacQueen			

## International Relations - Honours Level - 2014/15 - August 2014

IR3102 Conflict in the Middle East				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Mon			
<p>This module centralises conflict within the Middle-East as a broad area of inquiry and investigates the political, economic and social conditions generating conflict both within and between states in the region. The subjects covered include the emergence and meaning of the "Nation-state" in the Middle East; the ideological relationship between Islam and Pan-Arabism; the latter and State-Nationalism; state civil society relations as well as inter-ethnic and gender-related conflicts. The module also covers all aspects of the Arab-Israeli conflict.</p>				
<b>Programme module type:</b>	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			

IR3109 Politics and State Formation in the Middle East				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	1.00 pm Mon			
<p>This module examines the modern political history of the Middle East, concentrating on the period since 1945. It examines how the pre-modern historical heritage of the region, the impact of imperialism and the advance of modernisation have shaped contemporary politics. The module also examines contemporary political ideologies and movements, elites, the role of the military, authoritarian state structures, economic development policies, and the prospects of Islamization and democratisation. This is done through case studies mainly of Turkey, Iran, Saudi Arabia, Egypt, Syria and, to a lesser extent, other countries.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Saouli			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Saouli			

## International Relations - Honours Level - 2014/15 - August 2014

IR3111 Asian Security				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	4.00 pm Tue			
<p>Establishing a security framework for Asia that will limit the risks of major war is one of the great challenges in contemporary international politics. This module will examine the evolution of security relations in Asia with special attention being given to South and East Asia and to the period since the end of the Cold War. It will consider the security cultures and policies of China, India and Japan, their relations with one another and with the United States, and the security 'architecture' that might emerge in Asia. It will also examine unresolved disputes over Taiwan and Kashmir, problems on the Korean peninsula, and the role of multilateral regimes and other international institutions.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr P Lehr			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Lehr			

IR3302 Democracy and Revolution in North Africa				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Mon			
<p>This module examines the causes and evolution of democracy and authoritarianism in North Africa in the post-colonial period. It aims to describe the structural and inter-subjective features of democratic and authoritarian change, and to locate them in vis-à-vis the evolution of regional politics and of the international system. It describes the specificities and dilemmas of authoritarian and democratic governance in each polity with a particular focus on the developments of the last decade (post-2001). It examines in details the relationship between the state and civil society – considering particularly the role of Islamism – within the larger context of processes of political and economic liberalisation as well as regional (north-south) integration.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 45%, Practical Examinations = 0%, Coursework = 55%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 45%, Coursework = 55%			
<b>Module Co-ordinator:</b>	Dr J Gani			
<b>Lecturer(s)/Tutor(s):</b>	Dr Ja Gani			

## International Relations - Honours Level - 2014/15 - August 2014

IR4099 Honours Dissertation in International Relations				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	3.00 pm - 5.00 pm Tue (Sem 1), 3.00 pm - 5.00 pm Mon (Week 2, Sem 2)			
The dissertation will be not more than 12,000 words. Topics must be capable of being supervised by established staff and each student will (a) submit a dissertation outline to the School, (b) be assigned a supervisor, who will be available to discuss issues related to the dissertation, (c) be required to attend nine two-hour research seminars and five supervisory meetings of up to one hour. Eight one-hour tutorials (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a> )				
<b>Programme module type:</b>	Compulsory for Single Honours International Relations. Optional for Joint Honours International Relations, International Relations and Modern Languages (two languages), Middle East Studies.			
<b>Pre-requisite(s):</b>	IR2005 and IR2006	<b>Anti-requisite(s):</b>	Any other Dissertation module	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Nine research skills seminars of two hours to be held in Weeks 1,2,3,4,5,6,7, and 10 in Semester 1 and Week 2 in Semester 2. Five one-hour individual consultation sessions with assigned supervisors. Compulsory attendance at eight one-hour tutorial sessions in semester 1. One one-hour information session in semester 2 of the junior honours year. Additional consultation hours with supervisor, tutor, and the Dissertation Coordinator are also available for dissertation students.			
	<b>Scheduled learning:</b> 68 hours		<b>Guided independent study:</b> 532 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Literature Review (semester 1) = 15%, Dissertation (semester 2) = 85%			
<b>Module Co-ordinator:</b>	Dr J Murer			

## International Relations - Honours Level - 2014/15 - August 2014

IR4401 Communication in International Relations				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	not applicable.			
This module is part of ID4002 'Communication and Teaching in Arts & Humanities' in which students gain substantial experience of a working environment. This component offers the opportunity to further develop an area of interest in communicating themes of International Relations to contemporary contexts. It is available only to participants in the placement module.				
<b>Programme module type:</b>	With permission, this is an optional module (taken with ID4002) for International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006	<b>Co-requisite(s):</b>	ID4002	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Independent work. 6 hours of essay supervision and 22 office/contact hours over the semester.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			

IR4507 International Relations of the Middle East				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm Tue			
This module examines Middle East international relations, with a special concern for the following topics: 1) the special character of the Middle East state system, including the exceptional impact of the international system on the region and the special role of identity and religion in regional politics; 2) the determinants of the foreign policies of Middle East states, including the impact of variations in state structures (between monarchies, radical republics and semi-democracies) on foreign policy behaviour; and 3) analysis of regional conflict and war and of order-building experiments.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof R Hinnebusch			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Hinnebusch			

## International Relations - Honours Level - 2014/15 - August 2014

IR4512 Britain and the World				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Thu			
<p>This module examines the orientations and foundations of British foreign policy in the post-imperial era. The first section explores the manner in which the United Kingdom dealt with the sudden loss of empire and the diminution of its power and influence in world politics. The second deals with Britain's relationship with her European neighbours and with the prospect of European union. The final section examines Britain's engagement with the new international order of the post-Cold War era. It concludes with a consideration of Britain's place in the contemporary world.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr Sutton			
<b>Lecturer(s)/Tutor(s):</b>	Dr Sutton			

IR4514 Global Public Policy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon Wed			
<p>This module examines the formulation of multilateral agreements to manage global policy problems in a variety of issue-areas such as environment, new technologies, and sustainable development. It will use a variety of IR and related social theories such as functionalism, regime theory and the common-heritage of mankind, to explain problems in constructing binding international agreements. Extended case studies may include climate change, the law of the sea and the 'digital divide'.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			



IR4516 The International Relations of Sub-Saharan Africa				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Mon			
<p>This module examines Sub-Saharan Africa's relations with and position in the global political economy. The module will aim to help understand the historical roots and contemporary impulses that help shape Africa's international relations. The module explores how Africa's nation-states and peoples interact with multilateral development banks, international institutions, aid organisations and other actors (including both "normal" external states and clandestine networks of accumulation). We will consider Africa's debt and its impact upon the continent's international relations, acknowledging that it is unsustainable but asking if total debt write-off is feasible or desirable. Why Africa's share in world trade is declining and the impact this has on the continent will also be discussed as will the role of trade restrictions and the WTO in shaping Africa's international relations. We will ask what is the logic of regional integration and can it work in Africa, whilst examining the stated goals of political unity and economic progress through the African Union. Is this just rhetoric or is there now hope for solid achievements on both political and economic fronts? We finish with an evaluation with the latest plan to put Africa on the global map: the New Partnership for Africa's Development (NEPAD).</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof I C Taylor			
<b>Lecturer(s)/Tutor(s):</b>	Prof I C Taylor			

## International Relations - Honours Level - 2014/15 - August 2014

IR4520 Political Islam and International Relations				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Tue			
<p>This module examines the causes, evolution and diffusion of political Islam in the core regions of the Muslim world and beyond in the modern period. It aims to describe the key features of this phenomenon, its influence on national and regional politics as well as on international relations. It describes the specificity of political Islam as a religious-based ideology and how it informs the raise of pro-Islamic movements across the Muslim world. It focuses on the relationship between Islamic movements and state, and between Islamic movements and civil society within the context of political liberalism and pluralism. The liberal and scriptural interpretations that dominate contemporary debates will be examined in relation to the local, national, regional and global context of contemporary international politics. Of particular relevance are the issues of the compatibility of politics and democracy, of political Islam and state power, of political Islam and liberal-democracy, and of the Western representation of political Islam as a security threat.</p>				
<b>Programme module type:</b>	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr F Volpi			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Volpi			

## International Relations - Honours Level - 2014/15 - August 2014

IR4522 Critical Approaches to International Security				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module will analyse the various challenges to the concept of international security since the end of the Cold War, facilitate critical thinking about the changing meaning of security as it relates to different modes of theoretical analysis, and critically analyse the re-emergence of an emphasis on security as the threat and use of force since 11 September 2001.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof K Fierke			
<b>Lecturer(s)/Tutor(s):</b>	Prof K Fierke			

IR4532 The Cultural Politics of Human Rights				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Mon			
There are more people than ever before who believe strongly in the necessity of the inclusion of human rights considerations when thinking about actions at every level of societal interaction; personal, local, national and international. The use of the concept is, however, frequently misused and the outcome of rights campaigns is often far from the original intention. In exploring these complex issues the module is divided into two parts. In PART I the long-standing and polarising debate between liberal and Marxian theories regarding the role of the concept of human rights in society will be examined. Many theorists are now attempting to go beyond this divide to think through the potential for the concept in the process of social transformation. The social constructionist and neo-Gramscian approaches to the conceptualisation of human rights will be introduced. Drawing on this theoretical discussion a series of contemporary issues will be explored in PART II and the focus will be on suitability of the concept in any programme of social transformation by considering the role - nationally and internationally - of the legal system, economic relations, government and non-government organisations.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr G S Sanghera			
<b>Lecturer(s)/Tutor(s):</b>	Dr G S Sanghera			

## International Relations - Honours Level - 2014/15 - August 2014

IR4533 The Arab - Israeli Conflict				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Mon			
<p>This module is an essential primer for all students wishing to explore the complexities of the Arab-Israeli conflict from its origins to its recent evolution in the 'post' colonial era. Students will gain significant knowledge about the local, regional and international dimensions of the conflict with an emphasis on historical and legal analyses. A critical appreciation of intellectual debates will assist students in navigating their way through the themes of state formation, secular and religious ideologies, identity politics, human rights discourses and the role of the media in the construction of the conflict. Students should end the semester with a sound knowledge-base about the region's most enduring and intractable conflict.</p>				
<b>Programme module type:</b>	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J Gani			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Gani			

IR4535 Theories of Friendship, Solidarity and Peace				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Wed			
<p>In political theory the concept of peace may be characterised as an umbrella of varying size. At its smallest, the umbrella only captures the bare bones of the concept: peace means absence of war and violence. As it grows in diameter, the umbrella of peace starts to include other factors: first, it captures some agreement on rules regulating conflict and disagreement, then agreement on some basic values, then the bond of solidarity, of fraternity and friendship. This module introduces students to prominent theories of peace in the western tradition and provides them with a foundation for understanding the meaning and significance of peace in different historical circumstances.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 tutorial.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr G Slomp			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Slomp			

## International Relations - Honours Level - 2014/15 - August 2014

IR4536 Warmongers and Peacemakers: Religious Actors and Conflict				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am Mon			
<p>This comparative module introduces students to the complex relationship between religion and violence by addressing the conflict and peacemaking capacities of religion and religious actors. Set in the context of theoretical approaches towards religion, politics and conflict; case studies will be examined from a wide range of geographical areas, faiths and conflict types. Conflicts with a religious element covered include those relating to political supremacy, occupation and resistance, nationalism, separation and intercommunal violence. The module also examines religious institutions and authoritarianism as well as the role of transnational religious actors regarding conflict and peace.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			

IR4538 Identities, Belonging and Others				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Tue			
<p>The module explores the processes of collective identity formation and its role in conflict; students will analyse the processes by which individuals form group attachments and come to be recognised as belonging to a particular community. Yet these processes of demarcation also are performances of exclusion, establishing boundaries of those to be trusted and those who may be subject to violent repudiation. The module will explore conceptions of nationalism and ethnicity and how the constructions of each can lead to communal violence. Similarly students will examine modes of reproduction and transmission of class and gender identities, and how all of these fluid identities shift and realign while maintaining distinctions, designating who belongs and who is other.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Murer			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Murer			

## International Relations - Honours Level - 2014/15 - August 2014

IR4540 The Changing Character of War				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm Mon			
<p>The aim of this module is to discuss change and continuity in the theory and practice of war. The module is organised along historical instances and phases of war over the past two decades. Starting with the French Revolutionary and Napoleonic Wars, the module will consider major events in the history of war such as the two world wars and the Cold War. It discusses to what extent terrorism and humanitarian intervention present new forms of war. Each session will analyse change and continuity regarding four thematic areas: strategic thought and practice, technology, socio-political conditions and cultural representations of war. The module is intended to give students a nuanced overview of major developments in the theory and practice of war and hence to enable them to discuss contemporary security issues from a historically well-informed perspective.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Scheipers			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Scheipers			

IR4542 Gender and Terrorism				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 - 4.00 pm Mon or 10.00 - 12.00 noon Tue			
<p>This module will familiarise students with how gender is a construction that privileges certain actors over and against others. Bluntly, gender, similarly to race and class, is a tool for the construction and maintenance of power. Therefore, this module aims to answer, 'how does Terrorism Studies scholarship privilege certain actors?' Beginning with the assumed primacy of the state, the students will deconstruct how Terrorism Studies' reliance upon the discourse of legitimacy and rationality denies agency to certain groups and actors. Students will then evaluate how such discourse impacts the scholarship and information regarding women who are involved in political violence.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr C E Gentry			
<b>Lecturer(s)/Tutor(s):</b>	Dr C E Gentry			

## International Relations - Honours Level - 2014/15 - August 2014

IR4543 Activism and Resistance				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm Thu			
<p>This module aims to examine the many forms of activism and resistance that take place in the international system, with an emphasis upon those whose claims for agency may most often go unheard, whether for reasons of age, cause, ethnicity, gender, race, or sexuality. This module will provide both a theoretical grounding in the literatures of activism and resistance, and an empirical analysis of the acts that have taken place in their name using the so-called 'weapons of the weak'. From such acts, often everyday in character, this module will examine the significance of activism and resistance in global terms.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester. Occasional film/video viewing.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof A Watson			
<b>Lecturer(s)/Tutor(s):</b>	Prof A Watson			

IR4544 Wars and Peace in the Caucasus				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	4.00 pm - 6.00 pm Thu			
<p>The Caucasus region has suffered some of the worst wars, terrorist attacks and violent state-led counter-insurgencies in recent history. This module examines the contending accounts of war, terrorism and instability, giving attention to such conflicts as Chechnya, Nagorno-Karabakh and those in Georgia, including the conventional war of 2008. The interests and efforts of regional and international actors in trying to secure the region will also be examined, as will thematic issues such as democratization and human rights promotion.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester. Occasional film/video viewing.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Examination = 50%, Coursework = 50%,			
<b>Module Co-ordinator:</b>	Prof R Fawn			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Fawn			

## International Relations - Honours Level - 2014/15 - August 2014

IR4545 Indian Foreign Policy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 Mon			
<p>This module is designed to provide an analysis of the emergence of India within the international system. Focusing upon the factors integral to such a phenomenon (from both theoretical and historical perspectives), students will build up a comprehensive understanding of the state's past, contemporary and future significance. After a historical overview, the module will evaluate key factors concerning how India conducts and formulates its foreign policy (from strategic and economic factors, to its regional and multilateral interactions). This analysis will then lead to a comprehensive evaluation of India's future challenges as an emergent Asian and global power in the 21st century.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester. Occasional film/video viewing.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr C Ogden			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Ogden			

IR4546 The Psychology of International Security				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed or 11.00 am - 1.00 pm Thu			
<p>This module will examine the role of psychological factors as they relate to international security. The field of psychology offers sophisticated and compelling accounts of the sources of human perception and behaviour. By applying psychological theories to the context of international security, we gain new insight into long-standing security issues, such as the security dilemma, terrorism, and the calculation of risks and benefits in decisions to go to war. Particular attention will be paid to perceptions and misperceptions, security policy-making, inter-group conflict and conflict-resolution, and the role of leaders' personalities in shaping their security preferences and behaviours.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Beasley			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Beasley			



## International Relations - Honours Level - 2014/15 - August 2014

IR4547 Shadows in the Global Political Economy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Fri			
<p>This module turns our attention to some of the less pleasant consequences of globalisation, because the same features that encourage the international trade in legal goods and services at the same time encourage the trade in illicit and illegal goods and services. Estimates vary, highlighting the difficulty to measure the clandestine, but the global shadow economy or illicit sector is around 22% of global GDP. This module looks at the illicit/illegal practices of non-state actors in the international and the measures taken by the international community to reduce, counter, and eliminate those practices. It begins with a consideration of economic globalisation and the applicable global political economy theories. It will then cover a number of topics, which may include: money laundering, organised crime, terrorist finance, conflict resources, informal economies, and corruption.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr W Vlcek			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Vlcek			

## International Relations - Honours Level - 2014/15 - August 2014

IR4548 Force and Statecraft				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	1.00 pm Thu			
<p>This module examines the strategic, ethical, and legal considerations inherent to leadership decisions over the deployment of force abroad. The first half of the module explores historic case studies including the British response to Hitler's rise, allied strategic bombing and the purposeful targeting of civilians in WWII, U.S. covert operations during the Cold War, international humanitarian intervention, and economic sanctions against Rhodesia and South Africa. The second half of the module is devoted to understanding recent deployments of force and developing policy responses to current crises such as the famine in East Africa and the civil conflict in Syria. Through debates, policy workshops, and simulations, students will directly contemplate the use of force as an instrument of statecraft.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr K Harkness			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Harkness			

IR4549 Theory, Critique and Ideology in International Relations				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Mon			
<p>This module is designed to examine the ideological background to the origins and development of International Relations as a distinct discipline. This is explicitly not a course on particular international ideologies (conservatism, liberalism, socialism, Islamism etc.). It is rather a course that introduces students to the sociology of knowledge in IR and assesses the ideological underpinnings of its disciplinary formation as a diverse yet separate area of knowledge in the Social Sciences. The module relates IR theory and historiography to cognate disciplines and theoretical traditions, with a special focus on post-Marxist theories of ideology, in order to offer students the theoretical tools necessary to challenge established narratives in IR, assess the promises and impasses of critical international theory and explore the future of theorising in international relations.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr V Paipais			
<b>Lecturer(s)/Tutor(s):</b>	Dr V Paipais			

## International Relations - Honours Level - 2014/15 - August 2014

IR4550 Art and War				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Wed or 4.00 pm - 6.00 pm Thu			
<p>This module focuses on the treatment of war in art broadly conceived: photography, films, paintings, music. It explores the ways in which these works contribute to our understanding of war, and by extension our understanding of international relations. Can works of art - works of the imagination - make us think or feel in ways that other works do not? How? ...</p> <p>The module will be run as a weekly seminar, with considerable scope for student-led exploration and discussion.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof A Danchev			
<b>Lecturer(s)/Tutor(s):</b>	Prof A Danchev			

IR4551 Cosmopolitanism and Global Politics				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Tue or 10.00 am - 12.00 noon Wed			
<p>There has been a resurgence of interest in cosmopolitanism in contemporary international political theory, based upon the premise that cosmopolitan politics and ethics offer an appropriate response to an increasingly connected and unequal world. This module will explore historical and contemporary theories of cosmopolitanism, as well as its ethical, political and cultural dimensions. We will consider arguments both for and against the notion of cosmopolitanism, and examine topical issues such as human rights, postcolonialism, democratization, sovereignty, war and peace, the environment, and humanitarian intervention.</p>				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour seminar (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof P Hayden			
<b>Lecturer(s)/Tutor(s):</b>	Prof P Hayden			

## International Relations - Honours Level - 2014/15 - August 2014

IR4552 The Politics of the Environment				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Thu			
The module provides students with an understanding of environmental discourses and covers key aspects of theory and practice. Students are introduced to a range of issues and will have an opportunity to explore and discuss these within small tutorial settings. The module will include a comparative element and will address timely issues such as climate change, biodiversity and water security. A distinct feature of this module will be the use of 'real world' student contributions: seminar papers, 'chaired' discussions and policy briefing essays.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Brown			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Brown			

IR4553 Europe, America and the Transatlantic				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm Wed			
This module will explore European and transatlantic security affairs using a variety of conceptual perspectives. The module will cover both contemporary and historical case studies in order to reach a better understanding of the nature of European and transatlantic security practices. After an introduction to central structures and topics in European and transatlantic security affairs, the module will examine specific topics that are currently under-researched in transatlantic security affairs.				
<b>Programme module type:</b>	Optional for International Relations and BA (Intl Hons) International Relations			
<b>Pre-requisite(s):</b>	IR2005 and IR2006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	<b>Scheduled learning:</b> 46 hours		<b>Guided independent study:</b> 254 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	TBC			
<b>Lecturer(s)/Tutor(s):</b>	TBC			

## School of Management

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Management (MN) Modules

<b>MN3101 Corporate Finance and Control</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module separates the problems of financially vulnerable firms from financially strong firms. The balance sheets and cash flows of vulnerable firms tend to be unusually susceptible to financial pressures and cyclical influences; asymmetries of information and agency costs operate as constraints on the access of such firms to external funding; they are likely to experience both credit and equity rationing in conditions of high interest rates; cash-flow interdependencies may adversely affect dividend and capital expenditure decisions alike. Financially strong firms to a large extent cope with such problems. Major decisions in financial management are presented in modern theory as multiple signals, which may corroborate or contradict one another, emitted by each firm.</p>				
<b>Programme module type:</b>	Compulsory for all Management Science degrees. Optional for all Management degrees.			
<b>Pre-requisite(s):</b>	MN2001 and MN2002	<b>Required for:</b>	MN3116	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 9 weeks) and 2 optional consultative hours (x 11 weeks)			
	<b>Scheduled learning:</b> 53 hours		<b>Guided independent study:</b> 147 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr J Linares-Zegarra			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Linares-Zegarra			

## Management - Honours Level - 2014/15 - August 2014

MN3102 Organisation Studies				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	4.00 pm - 6.00 pm			
<p>This module examines major organisational theories, surveys key topics in this area, and explores organisational forms that have emerged in recent times. The study of organisations has become a major topic of study, drawing on disciplines such as economics, sociology, psychology, anthropology, and history. The interdisciplinary nature of organisation studies has produced a wide variety of perspectives. These perspectives are based on different assumptions, and place strong emphasis on certain aspects of the organisation at the expense of others. When brought together, however, they yield a rich multifaceted picture of power socioeconomic systems that shape our lives.</p>				
<b>Programme module type:</b>	Compulsory for all Management degrees			
<b>Pre-requisite(s):</b>	MN2001 and MN2002	<b>Required for:</b>	MN4102, MN4239	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks) and 2 optional consultative hours (x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Greig			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Greig, Dr P Roscoe			

MN3116 Financial Markets and Investments				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The module is designed to give students a broad appreciation of world financial markets and the investment opportunities that lie within these markets. The module will cover major asset classes including equity, fixed income, financial derivatives and other alternative investments (e.g. hedge funds, private equity, real estate and commodities) as well as the relevant valuation techniques for these securities. Students will be introduced to regression analysis and how it can be applied in the process of investment management.</p>				
<b>Programme module type:</b>	Optional for all Management degrees			
<b>Pre-requisite(s):</b>	MN3101			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours (x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr X Chen			
<b>Lecturer(s)/Tutor(s):</b>	Dr X Chen			

## Management - Honours Level - 2014/15 - August 2014

MN3126 International Business				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module is intended to provide an introduction to the complexities and challenges of International Business. This is in preparation for more advanced Seminar and Dissertation work carried out at 4000 Level. It will build on pre-Honours work to address a number of detailed issues facing managers in multinationals, such as 1) internationalisation strategies, 2) country evaluation and selection, 3) the role and impact of government on interationalisation, 4) international markets and marketing, 5) international HRM, 6) the managerial control of multinationals, 7) Foreign Direct Investment and 8) International trade. It will thereby offer students the opportunity to analyse the implications of international business decisions at a range of levels, from (primarily) a strategic perspective.</p>				
<b>Programme module type:</b>	Optional for all Management degrees			
<b>Pre-requisite(s):</b>	MN2001 and MN2002	<b>Anti-requisite(s):</b>	MN4233	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Brown			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Brown			

MN3201 Research Methods: 1				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces research in the Social Sciences. It focuses on the skills and knowledge involved in understanding, evaluation and conducting research in the wider management field. The module will develop and begin to refine competencies that will occupy the students throughout their professional careers. Doing good research requires time, observation, diligence and reasoning. The module will explore issues, methods and dilemmas central to conducting and analysing research. The central theme throughout the module will be the examination of the links between the theoretical and empirical realms. In taking this module, students will experience the challenges of research and, with a diligent approach, they will also experience the thrill of discovery.</p>				
<b>Programme module type:</b>	Compulsory for Single Honours Management, Single Honours Management Science			
<b>Pre-requisite(s):</b>	Entry to a Single Honours Management or Management Science Degree			
<b>Co-requisite(s):</b>	MN3202	<b>Required for:</b>	MN4301	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 3 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 47 hours		<b>Guided independent study:</b> 153 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof H T O Davies			
<b>Lecturer(s)/Tutor(s):</b>	Prof H T O Davies, Dr S Mansell			

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MN3202 Research Methods: 2				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module follows on from MN3201. It builds key research competencies in library search, problem definition, literature review and study design. These competencies will be developed using a combination of class lecture; library visit; group surgeries; group progress meetings; one-to-one work with individual members of academic staff; and self motivated and conducted research. Students are expected to master library research techniques, including the use of electronic resources in research; literature synthesis; research problem formulation; and the preparation of a clear and the preparation of clear and focused research proposals.</p>				
<b>Programme module type:</b>	Compulsory for Single Honours Management, Single Honours Management Science			
<b>Pre-requisite(s):</b>	Entry to a Single Honours Management or Management Science Degree			
<b>Co-requisite(s):</b>	MN3201	<b>Required for:</b>	MN4301	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 5 weeks) and at least 4 hours of supervisory meeting)			
	<b>Scheduled learning:</b> 14 hours		<b>Guided independent study:</b> 188 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	DrT Jung			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

MN4211 International Marketing				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module begins by examining the scope of international marketing and identifying the nature of this specialised environment. It continues with an exploration of the range of international market entry and pricing strategies and ends with a review of the impact of ethical considerations and the political dimensions of international marketing.</p>				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 10 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 54 hours		<b>Guided independent study:</b> 146 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Mr W Barlow			
<b>Lecturer(s)/Tutor(s):</b>	Mr W Barlow			



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MN4213 Human Resource Management				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module is an introduction to the subject which builds on students existing knowledge of management. It aims to develop participants critical appreciation of the role of HRM in organisations and to promote an understanding of the issues faced by managers in attracting, motivating and retaining employees				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S A Chillas			
<b>Lecturer(s)/Tutor(s):</b>	Dr S A Chillas			

MN4214 Management of Change				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module examines the process of change and how this process might be managed. Various models for bringing about planned change are analysed and their strengths and weaknesses highlighted. The issues of team building, participation and resistance to change will be addressed. Case studies enable the links between theory and practice to be made; these cases will focus on managing technical change, introducing cultural change and improving the quality of goods and services.				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof S Nutley			
<b>Lecturer(s)/Tutor(s):</b>	Prof S Nutley			

## Management - Honours Level - 2014/15 - August 2014

MN4223 International Banking				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri			
<p>International banks operate on a cross-border basis. They buy and sell foreign exchange, diversify international risks and advance credit for trade and investment projects. Typically international banks are large domestic commercial banks, which often operate in Euro markets and offshore centres. This module covers two main areas. In the first part students will examine the characteristics of international banking and the markets and activities in which international banks operate. In the second part, the module is concerned with the regulation of international banking. The role of institutions such as the World Bank and IMF, and the causes and effects of international banking crises are featured. This module aims to give students a good grounding in the theory and practice of modern international banking and an appreciation of the related policy issues involved.</p>				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 70%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Dr P Abedifar			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Abedifar, Dr L H Nguyen			

MN4224 Consuming Culture				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module considers a number of key issues which are linked to the emergence of what some would call a global consumer society. We shall first explore the historical development of consumer societies and address the question of whether these are primarily individualist or collectivist in nature. Following from this, the module invites discussion of a range of topical issues with respect to consumer society including changing perceptions of space and time, involving an expansion of space and an apparent slowing down of time; ideas about morality and value; the creation of meaning; consumer identity; peoples relation to the body; finally addictive consumption.</p>				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 70%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Dr J Desmond			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Desmond			

## Management - Honours Level - 2014/15 - August 2014

MN4227 Corporate Social Responsibility, Accountability and Reporting				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides an introduction to and analysis of corporate social responsibility and sustainability, the meaning, tensions and conflicts that social responsibility entails and the role that accountability can play in the discharge of responsibility in a democracy. The module will examine the theory and practice of social, environmental and sustainability reporting as a manifestation of social and environmental accountability and explore and assess current experiences with that reporting. The module will examine the practical and political constraints on the development of substantive social, environmental and sustainability reporting and explore different ways in which the discharge of social accountability might be achieved.</p>				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science. Optional for Sustainable Development.			
<b>Pre-requisite(s):</b>	EITHER both MN2001 and MN2002 OR SD2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 11 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 145 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof J Ferguson			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Ferguson			

MN4236 Sociology of Finance				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>In the wake of the global financial meltdown, scholars and professionals alike struggle to understand the causes of the collapse. A sociology of financial markets offers unique insights here. This module will provide a broad introduction to the sociology of finance, including: the research field and its roots in science studies; the architecture and technologies of markets; the role and importance of calculation; the chicken-and-egg problem of economic theory and practice; the specific practices of measurement and calculation that precipitated the crisis; and alternative financial perspectives, such as that offered by Islamic finance. Students will develop a deep understanding of the mechanisms that power financial markets and their relevance to the global economy.</p>				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 70%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Dr P J Roscoe			
<b>Lecturer(s)/Tutor(s):</b>	Dr P J Roscoe			

## Management - Honours Level - 2014/15 - August 2014

MN4238 Sustainable Development and Management				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module examines the origin of the concept of sustainable development in public policy discourses with particular focus on the implications this concept has for the operation of business organisations. The module will examine the difficulties of applying notions of sustainable development to single organisations as well as the challenges which conventional economic systems present to sustainable development. The module will examine the theory and practice of managing for sustainable development, drawing on examples which are found in business. In addition, selected topics in managing for sustainable development will be examined.</p>				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science. Optional for Sustainable Development.			
<b>Pre-requisite(s):</b>	EITHER both MN2001 and MN2002 OR SD2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 9 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 53 hours		<b>Guided independent study:</b> 147 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Russell			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

MN4241 Knowledge Work: Practice and Context				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>Knowledge work is widely regarded as desirable, the hallmark of successful economies. It is evident in a variety of work settings, for example, the professions, financial and management services, and so-called creative industries. Great efforts are made to develop and extend this form of work internationally, regardless of context. But what does knowledge work involve? How might it be understood? How might such forms of work be organised? What challenges might this entail and how might these be understood? This module explores these issues by focusing on knowledge and context from a practice perspective. The aim of the module is to offer participants some conceptual means to help them address these questions in the world of work and beyond.</p>				
<b>Programme module type:</b>	Optional for all Management degrees			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 48 hours		<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr G Greig			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Greig			

## Management - Honours Level - 2014/15 - August 2014

MN4242 Advertising and Marketing Communications				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>Advertising has an established presence in developed economies and is a key aspect of companies' marketing communications programmes. The module will extend your knowledge of this key marketing function by developing your understanding of advertising as an element in the integrated marketing communications mix and how the advertising process is practiced and managed.</p>				
<b>Programme module type:</b>	Optional for all Management degrees			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 9 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 53 hours		<b>Guided independent study:</b> 147 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Mr W Barlow			
<b>Lecturer(s)/Tutor(s):</b>	Mr W Barlow			

MN4243 Philanthropy and Philanthropreneurs: the business of doing good				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Philanthropy is undergoing a renaissance. From Bill Gates to George Soros, from the Rockefeller Foundation in the US to the Bharti Foundation in India, philanthropists and philanthropic foundations are taking an increasingly active role in shaping society and using their private resources for public benefit and social change. But what motivates business leaders to act as philanthropists? How can we understand philanthropic organisations and their role in society? What, if any, is the impact of philanthropic activities on society? How are business models and ideas changing philanthropy? This module critically examines and reviews the philanthropic field, its nature, characteristics, drivers and activities.</p>				
<b>Programme module type:</b>	Optional for all Management degrees			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 seminar (x 5 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 49 hours		<b>Guided independent study:</b> 151 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Module Co-ordinator:</b>	Dr T Jung			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Jung			

## Management - Honours Level - 2014/15 - August 2014

MN4244 Behavioural Decision Making				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module explores the problems of decision-making and judgment in leadership contexts. It is set around a collection of stories and cases, meant to vividly illustrate important and challenging decision scenarios. Each of the scenarios is examined with theories and concepts from social/cognitive psychology. The purpose of the module is to provide students with opportunity to critically examine the 'intuitive' vs. 'rational' course of action in scenarios that involve goal-setting, uncertainty, delayed gratification, and "tragic trade-offs." Students will be equipped to identify judgmental biases and to reason about ways to deal with these.</p>				
<b>Programme module type:</b>	Optional for all Management degrees			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 seminar (x 11 weeks), and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 145 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Myrseth			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Myrseth			

MN4245 Leadership Development				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students on the Second Year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides students with the opportunity to critically examine current and classic theories of leadership, develop an approach to formative leadership development that can be transferred to organizational contexts, and develop a reflexive, theoretically informed approach to the development of their own leadership development strategies.</p>				
<b>Programme module type:</b>	Optional for all Management degrees			
<b>Pre-requisite(s):</b>	MN3102, MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) 1 seminar (x 8 weeks), 1 practical class (x 6 weeks) and 3 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 69 hours		<b>Guided independent study:</b> 131 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S Romenska			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Romenska			

## Management - Honours Level - 2014/15 - August 2014

<b>MN4263 Entrepreneurship and Small Business Development</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Enterprise lies at the heart of economic growth and development. The aim of this unit is to develop students' awareness of the various debates concerning the nature of Entrepreneurship in the society and in the economy. It will also enable students to make use of the various concepts of entrepreneurship in understanding the small business development process, and provide an insight into how those going through this process may be supported and assisted.				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures (x 9 weeks) and a further 5 hours of tutor contact, and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 54 hours		<b>Guided independent study:</b> 146 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Mr C Lovatt			
<b>Lecturer(s)/Tutor(s):</b>	Mr C Lovatt			

<b>MN4266 Non Governmental Organisations (NGOs): Contexts, Contributions, and Challenges</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Voluntary organisations are highly significant actors within society, the democratic polity, and the economy. They are also commonly perceived to be distinctive organisations in certain key respects that set them apart from either public sector organisations or commercial enterprises, and which make them particularly challenging to manage. This module will examine the roles played by voluntary organisations, the nature of the organisations themselves, and the issues and challenges that they are facing as a number of significant shifts, that include, for example, technological developments and major public policy initiatives, occur within the wider external environment in which they are embedded. The module will be of interest to students who are considering a career in the voluntary sector, government, the wider public sector, or as management consultants.				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science. Optional for Sustainable Development.			
<b>Pre-requisite(s):</b>	MN2001 and MN2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 3 x 1-hour workshops, and 2 optional consultative hours ( x 11 weeks)			
	<b>Scheduled learning:</b> 47 hours		<b>Guided independent study:</b> 153 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Burt			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Burt			

## Management - Honours Level - 2014/15 - August 2014

MN4301 Management Project				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Planned timetable:</b>	To be arranged.			
<p>Students are required to complete the Management Research Project closely based upon the research proposal submitted in MN3202. The module can be taken in either the first or second semester of the Senior Honours year. The completed work is expected to be 6000 – 8000 words in length. It may involve fieldwork or desk-based research, or a combination of both. It should have a strong conceptual or theoretical component. It may be of a problem solving nature. Time management and the ability to work to deadlines will be integral to the assessment. The assessed work will be scored for clarity, focus, purpose, rationale and attention to detail. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for Single Honours Management, Management Science degrees			
<b>Pre-requisite(s):</b>	MN3201 and MN3202	<b>Anti-requisite(s):</b>	MN4209	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and at least 6 hours of supervisory meetings			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 192 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Project report / dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr T Jung			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Jung			

MN4310 Scenario Thinking				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>The module aims to provide students with a better understand the complexity of global, national or regional environments through the use of scenarios and to use the scenario process to assist creative strategy development. In addition, the module aims to use the scenario process to integrate a number of important organisational development concepts that help to provide organisations with future vision and adaptability: imagination; action learning; narratives and 'storying'; competencies and dynamic capabilities; reflective strategic consulting; reflexive practices.</p>				
<b>Programme module type:</b>	Optional for all Management degrees, Management Science			
<b>Pre-requisite(s):</b>	MN2001 and MN2002	<b>Anti-requisite(s):</b>	MN4225	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 4 lectures (x 6 weeks) and 2 tutorials (x 6 weeks), and 3 optional consultative hours (x 6 weeks)			
	<b>Scheduled learning:</b> 54 hours		<b>Guided independent study:</b> 146 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr P C Hibbert			
<b>Lecturer(s)/Tutor(s):</b>	Dr P C Hibbert			



## Management - Honours Level - 2014/15 - August 2014

<b>MN4311 Dynamic Strategic Management</b>			
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	4.00 pm - 6.00 pm.		
<p>The module introduces students to the basic principles of analysing strategic issues in a dynamic setting. It provides an overview of the complexity of strategic management within the context of increasing global competition. It covers the historical antecedents of modern approaches; evaluates rational, incremental, and evolutionary views on strategy formulation; includes corporate industrial analysis and examines analytical approaches such as portfolio models. Strategy formulation and implementation are considered in practice by using a combination of the results of consulting work, guest speakers, and case studies.</p>			
<b>Programme module type:</b>	Compulsory for all Management degrees		
<b>Pre-requisite(s):</b>	MN2001 and MN2002	<b>Anti-requisite(s):</b>	MN4203
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)		
	<b>Scheduled learning:</b> 48 hours	<b>Guided independent study:</b> 152 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr P Keenan		
<b>Lecturer(s)/Tutor(s):</b>	Dr P Keenan		



## School of Mathematics & Statistics

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Mathematics (MT) modules

MT3501 Linear Mathematics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon (even weeks), Tue and Thu			
This module aims to show the importance of linearity in many areas of mathematics ranging from linear algebra through to geometric applications to linear operators and special functions. The main topics covered are: linear dependence and independence; change of basis; inner product spaces; inequalities; convergence in Euclidean spaces; Fourier series and adjoint and self-adjoint operators.				
<b>Programme module type:</b>	Compulsory for all MMath programmes, BSc/MA Mathematics, BSc Statistics, BSc joint Honours Statistics programmes, MPhys Mathematics and Theoretical Physics and MPhys Theoretical Physics. At least two of MT3501, MT3503 and MT3504 are compulsory for all other joint Mathematics programmes (including MChem Chemistry with Mathematics and BSc/MA Mathematics 'with' degrees)			
<b>Pre-requisite(s):</b>	MT2001 or MT2501			
<b>Required for:</b>	MT4003, MT4111, MT4513, MT4514, MT4516, MT4517, MT4519, MT4521, MT4527, MT4530, MT5827			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 90%, Coursework = 10%			
<b>Module Co-ordinator:</b>	Dr M R Quick			
<b>Lecturer(s)/Tutor(s):</b>	Dr M R Quick			

**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT3503 Complex Analysis</b>			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	12.00 noon Mon (odd weeks), Wed and Fri		
This module aims to introduce students to analytic function theory and applications. The topics covered include: analytic functions; Cauchy-Riemann equations; harmonic functions; multivalued functions and the cut plane; singularities; Cauchy's theorem; Laurent series; evaluation of contour integrals; fundamental theorem of algebra; Argument Principle; Rouché's Theorem.			
<b>Programme module type:</b>	Compulsory for MMath Applied Mathematics, MMath Mathematics, MMath Pure Mathematics and BSc/MA Mathematics. At least two of MT3501, MT3503 and MT3504 are compulsory for BSc/MA joint Honours Mathematics programmes (including Mathematics 'with' degrees) and MChem Chemistry with Mathematics. Optional for all other programmes in the School.		
<b>Pre-requisite(s):</b>	MT2001 or MT2503		
<b>Required for:</b>	MT4005, MT4111, MT4507, MT4513, MT4514, MT4516, MT4519, MT4527, MT4530, MT4551, MT5802		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 90%, Coursework = 10%		
<b>Module Co-ordinator:</b>	Dr C V Tran		
<b>Lecturer(s)/Tutor(s):</b>	Dr C V Tran		

MT3504 Differential Equations				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	9.00 am Mon (odd weeks), Wed and Fri			
<p>The object of this module is to provide a broad introduction to analytical methods for solving ordinary and partial differential equations and to develop students' understanding and technical skills in this area. This module is a prerequisite for several other Honours options. The syllabus includes: existence and uniqueness of solutions to initial-value problems; series solutions of second-order o.d.e.'s; examples including Bessel, Legendre and Airy equations; nonlinear o.d.e.'s; classification of second order linear p.d.e.'s; method of separation of variables; eigenvalues for boundary conditions of mixed type; characteristics and reduction to canonical form.</p>				
<b>Programme module type:</b>	<p>Compulsory for MMath Applied Mathematics, MMath Mathematics, MMath Pure Mathematics, BSc/MA Mathematics, MPhys Mathematics and Theoretical Physics and MSci Applied Quantitative Finance.</p> <p>At least two of MT3501, MT3503 and MT3504 are compulsory for BSc/MA joint Honours Mathematics programmes (including Mathematics 'with' degrees) and MChem Chemistry with Mathematics.</p> <p>Optional for all other programmes in the School of Mathematics &amp; Statistics.</p>			
<b>Pre-requisite(s):</b>	MT2001 or (MT2503 and MT2507)			
<b>Required for:</b>	MT4005, MT4111, MT4507, MT4508, MT4511, MT4513, MT4514, MT4516, MT4519, MT4530, MT4551			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 examples class (week 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> Written Examination = 100% (2-hour final exam = 90%, class test = 10%)			
<b>Module Co-ordinator:</b>	Dr M Carr			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Blackburn, Dr M Carr			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT3600 Fundamentals of Pure Mathematics			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu		
The aim of this module is to introduce the fundamental algebraic and analytic concepts in pure mathematics in the context of the number systems.			
<b>Programme module type:</b>	Compulsory for MMath Pure Mathematics. At least one of MT3600, MT3601 and MT3606 is compulsory for MMath Mathematics and BSc/MA Mathematics. At least one of MT3600 and MT3601 is compulsory for BSc/MA joint Honours Mathematics programmes (including Mathematics 'with' degrees) and MChem Chemistry with Mathematics. Optional for all other programmes in the School.		
<b>Pre-requisite(s):</b>	MT2002 or MT2502 or MT2505 or (MT2001 and MT1003)		
<b>Required for:</b>	MT4003, MT4517, MT4521		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%		
<b>Module Co-ordinator:</b>	Prof N Ruskuc		
<b>Lecturer(s)/Tutor(s):</b>	Dr T Brough, Prof N Ruskuc		

**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT3601 Fundamentals of Applied Mathematics</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (odd weeks), Wed and Fri			
<p>This module is designed to introduce students to the mathematical methods which are needed to go on to further study of fluid mechanics, magnetohydrodynamics and electromagnetism. It consists of a revision of the techniques of vector calculus, followed by a discussion of the basic equations of fluid dynamics and electromagnetism. The properties of these equations are then illustrated by considering some basic properties of fluid flow and of magnetohydrodynamics.</p>				
<b>Programme module type:</b>	<p>Compulsory for MMath Applied Mathematics. At least one of MT3600, MT3601 and MT3606 compulsory for MMath Mathematics and BSc/MA Mathematics.</p> <p>At least one of MT3600 and MT3601 compulsory for BSc/MA joint Honours Mathematics programmes (including Mathematics 'with' degrees) and MChem Chemistry with Mathematics.</p> <p>Optional for all other programmes in the School.</p>			
<b>Pre-requisite(s):</b>	MT2003 or (MT2506 and MT2507) or (MT2503 and PH3081) or (MT2001 and PH3081)			
<b>Required for:</b>	MT4509, MT4510			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr A L Haynes			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Blackburn, Dr A L Haynes			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT3606 Fundamentals of Statistics			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu		
This module provides a bridge between second year and Honours modules in statistics. The module covers a range of fundamental statistical methodology. Topics covered include randomness and goodness-of-fit, discrete data and distributions, continuous distributions, introduction to Bayesian methods, likelihood-based methods.			
<b>Programme module type:</b>	Compulsory for MMath Statistics, BSc Statistics and BSc/MA joint Honours Statistics programmes. At least one of MT3600, MT3601 and MT3606 is compulsory for MMath Mathematics and BSc/MA Mathematics. Optional for all other programmes in the School.		
<b>Pre-requisite(s):</b>	MT2004 or MT2508		
<b>Required for:</b>	MT4516, MT4527, MT4530, MT4531, MT4537, MT4606, MT4609, MT5701, MT5751, MT5831		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).		
	<b>Scheduled learning:</b> 31 hours	<b>Guided independent study:</b> 119 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> Written Examination = 100% (2-hour final exam = 90%, class test = 10%)		
<b>Module Co-ordinator:</b>	Prof S T Buckland		
<b>Lecturer(s)/Tutor(s):</b>	Prof S T Buckland		



**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT3607 Computing in Statistics</b>			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	12.00 noon Mon (odd weeks), Wed and Fri		
Students will gain experience with the software package SAS and the statistical language and environment R. Statistical computing exercises include using and writing software to (1) extract and organise electronically stored data, (2) search for patterns and meaningful relationships, (3) fit mathematical models to characterise relationships succinctly, (4) produce useful graphical and numerical summaries.			
<b>Programme module type:</b>	Compulsory for MMath Statistics and MSci Applied Quantitative Finance. At least one of MT3607, MT4111, MT4112 and MT5611 is compulsory for MMath Mathematics. At least one of MT3607, MT4111 and MT4112 is compulsory for BSc/MA Mathematics and BSc Statistics. Optional for all other programmes in the School of Mathematics & Statistics.		
<b>Pre-requisite(s):</b>	pre- or co-requisite MT2004 or MT2508	<b>Co-requisite(s):</b>	pre- or co-requisite MT2004 or MT2508
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 practical class (weeks 2 - 11).		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%		
	<b>As used by St Andrews:</b> Written Examination = 40% (4 x 20-minute class tests), Coursework = 60%		
<b>Module Co-ordinator:</b>	Dr E Rexstad		
<b>Lecturer(s)/Tutor(s):</b>	Dr E Rexstad		

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT3706 Markov Chains and Processes				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu			
<p>This module provides an introduction to the theory of stochastic processes and to their use as models, including applications to population processes and queues. The syllabus includes the Markov property, the Chapman-Kolmogorov equations, classification of states of Markov chains, decomposition of chains, stationary distributions, random walks, branching processes, the Poisson process, birth-and-death processes and their transient behaviour, embedded chains, Markovian queues.</p>				
<b>Programme module type:</b>	Compulsory for MSci Applied Quantitative Finance At least two from MT3706, MT4531, MT4606 - MT4609 compulsory for BSc/MA joint Honours Statistics programmes Optional for all other programmes in the School At least two from MT3706, MT4527, MT4608 compulsory for BSc Management Science (single Honours).			
<b>Pre-requisite(s):</b>	MT2004 or MT2504			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 8 tutorials over the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr R King			
<b>Lecturer(s)/Tutor(s):</b>	Dr R King, Dr R Langrock			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT3802 Numerical Analysis				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Mon (odd weeks), Wed and Fri			
The module will introduce students to some topics in numerical analysis, which may include methods of approximation, numerical integration, solution of systems of linear equations by elimination and by iterative methods.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	MT2001 or MT2501	<b>Required for:</b>	MT5806	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Dr A P Naughton			
<b>Lecturer(s)/Tutor(s):</b>	Dr A P Naughton			

MT3832 Mathematical Programming				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	12.00 noon Mon (odd weeks), Wed and Fri			
The aim of this module is to introduce students to the formulation and solution of various linear programming problems. The subject matter will be illustrated by applying the methods of solution to real examples. The syllabus includes: formulation of linear problems; solution graphically and by simplex algorithm; sensitivity analysis; duality; transportation and transshipment; the assignment problem.				
<b>Programme module type:</b>	Optional for all programmes in the School Compulsory for all single and joint Honours BSc Management Science degree programmes			
<b>Pre-requisite(s):</b>	MT2001 or MT2501 or (MT1002 and MN2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr I B J Goudie			
<b>Lecturer(s)/Tutor(s):</b>	Dr I B J Goudie			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT3833 Utilities, Decisions and Inventories				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon (odd weeks), Wed and Fri			
This module is intended to provide an introduction to the formulation and solution of problems of decision-taking and problems in the management of inventory systems for a single item, to motivate the need for utility functions, and to explain how they are assessed and employed. The syllabus includes: decision theory; maximin and Bayesian approaches; Bayes theorem; Bellman's optimality principle; utility theory; utility functions; inventory theory.				
<b>Programme module type:</b>	Optional for all programmes in the School. Compulsory for all single and joint Honours BSc Management Science degree programmes.			
<b>Pre-requisite(s):</b>	MT2004 or MT2504 or (MT2001 and MT1007)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr I B J Goudie			
<b>Lecturer(s)/Tutor(s):</b>	Dr I B J Goudie			

**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT4003 Groups</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	9.00 am Mon (even weeks), Tue and Thu			
<p>This module introduces students to group theory, which is one of the central fields of the 20th century mathematics. The main theme of the module is classifying groups with various additional properties, and the development of tools necessary in this classification. In particular, the students will meet the standard algebraic notions, such as substructures, homomorphisms, quotients and products, and also various concepts peculiar to groups, such as normality, conjugation and Sylow theory. The importance of groups in mathematics, arising from the fact that groups may be used to describe symmetries of any mathematical object, will be emphasised throughout the module.</p>				
<b>Programme module type:</b>	Compulsory for MMath Pure Mathematics. At least two from MT4003, MT4004, MT4509, MT4510 and MT4606 are compulsory for MMath Mathematics. Optional for all other programmes in the School.			
<b>Pre-requisite(s):</b>	MT3600 or (MT2002 and MT3501) or MT2505			
<b>Required for:</b>	MT4521, MT5823, MT5824, MT5827, MT5829			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10), 1 tutorial and 1 examples class (weeks 2 - 11).			
	<b>Scheduled learning:</b> 45 hours		<b>Guided independent study:</b> 105 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr M R Quick			
<b>Lecturer(s)/Tutor(s):</b>	Dr M R Quick			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT4004 Real and Abstract Analysis				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu			
This module continues the development of real analysis started in MT2002. Topics that will be treated from a rigorous point of view may include: differentiation, Riemann integration, uniform convergence, function spaces.				
<b>Programme module type:</b>	Compulsory for MMath Pure Mathematics. At least two from MT4003, MT4004, MT4509, MT4510 and MT4606 are compulsory for MMath Mathematics. Optional for all other programmes in the School.			
<b>Pre-requisite(s):</b>	MT2002 or MT2502	<b>Required for:</b>	MT5825, MT5828, MT5830	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10), 1 tutorial and 1 examples class (weeks 2 - 11).			
	<b>Scheduled learning:</b> 45 hours		<b>Guided independent study:</b> 105 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof L Olsen			
<b>Lecturer(s)/Tutor(s):</b>	Prof L Olsen			

MT4005 Linear and Nonlinear Waves				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu			
This module gives an introduction to wave motion and its importance in many areas of applied mathematics. It begins with a discussion of the linear approximation for small amplitude waves and discusses properties of these such as dispersion relations, phase and group velocities, dissipation and dispersion. Some nonlinear effects such as wave steepening are then treated and an introduction given to some of the equations, for example Burger's and Korteweg de Vries, which are used to model nonlinear wave propagation.				
<b>Programme module type:</b>	Compulsory for MMath Applied Mathematics. Optional for all other programmes in the School.			
<b>Pre-requisite(s):</b>	(MT2003 or MT2506 or PH3081) and (MT3503 or MT3504)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr A N Wright			
<b>Lecturer(s)/Tutor(s):</b>	Dr A N Wright			

MT4111 Symbolic Computation			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	9.00 am Mon (odd weeks), Wed and Fri		
<p>This module aims to enable students to use Maple as a tool in their other modules and to turn naturally to such a package when solving mathematical problems. The module aims to illustrate the following points: a symbolic computation package allows one to conduct mathematical experiments; a symbolic computation package allows one to collect data about a problem being studied. This is similar to the way other scientists work. It is easier to try several different approaches to a problem and see which works. The machine is stupid. Intelligence comes from the user. The user thinks, the user interprets, the computer calculates.</p>			
<b>Programme module type:</b>	<p>At least one of MT4111, MT4112 and MT5611 compulsory for MMath Applied Mathematics and MMath Pure Mathematics</p> <p>At least one of MT3607, MT4111, MT4112 and MT5611 compulsory for MMath Mathematics</p> <p>At least one of MT3607, MT4111 and MT4112 compulsory for B.Sc/MA Mathematics and BSc/MA Statistics</p> <p>At least one of MT4111 and MT4112 compulsory for BSc/MA joint Honours Mathematics programmes (including Mathematics 'with' degrees)</p> <p>Optional for all other programmes in the School</p>		
<b>Pre-requisite(s):</b>	MT3501 or MT3503 or MT3504	<b>Anti-requisite(s):</b>	MT5611
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 practical session (weeks 2 - 11)		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 70%, Coursework = 30%		
<b>Module Co-ordinator:</b>	Dr J D Mitchell		
<b>Lecturer(s)/Tutor(s):</b>	Dr J McDermott, Dr J D Mitchell, Dr C M Roney-Dougal		

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MT4112 Computing in Mathematics			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Academic year:</b>	2015/6		
<b>Planned timetable:</b>	9.00 am Mon (even weeks), Tue and Thu		
This module is intended to introduce students to FORTRAN and the writing of computer codes to implement mathematical algorithms. The module includes a basic introduction to FORTRAN, and the implementation of mathematical algorithms in a well-documented FORTRAN program. Students are required to complete a project in addition to sitting the examination.			
<b>Programme module type:</b>	At least one of MT4111, MT4112 and MT5611 compulsory for MMath Applied Mathematics and MMath Pure Mathematics At least one of MT3607, MT4111, MT4112 and MT5611 compulsory for MMath Mathematics At least one of MT3607, MT4111 and MT4112 compulsory for B.Sc/MA Mathematics and BSc/MA Statistics At least one of MT4111 and MT4112 compulsory for BSc/MA joint Honours Mathematics programmes (including Mathematics 'with' degrees) Optional for all other programmes in the School.		
<b>Pre-requisite(s):</b>	either pre- or co-requisites MT3501, MT3503 or MT3504	<b>Anti-requisite(s):</b>	MT5612, Honours or Joint Honours Programme in Computer Science.
<b>Co-requisite(s):</b>	either pre- or co-requisites MT3501, MT3503 or MT3504	<b>Required for:</b>	MT5806
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10).		
	<b>Scheduled learning:</b> 25 hours	<b>Guided independent study:</b> 125 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 70%, Coursework: Project = 30%		
<b>Module Co-ordinator:</b>	Dr S J Brooks		
<b>Lecturer(s)/Tutor(s):</b>	Dr S J Brooks		



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MT4501 Topics in the History of Mathematics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	12.00 noon Mon (odd weeks), Wed and Fri			
The aim of this module is to give students an insight into the historical development of mathematics. Topics to be covered may include some of: the development of algebra, the origins of the calculus, the history of logarithms, the work of some individual mathematicians.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	either pre- or co-requisites - MT3501 or MT3503 or MT3504 or MT3606	<b>Anti-requisite(s):</b>	MT5613	
<b>Co-requisite(s):</b>	either pre- or co-requisites - MT3501 or MT3503 or MT3504 or MT3606			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> Written Examination = 50% (2 x 1-hour class tests), Coursework: Project = 50%			
<b>Module Co-ordinator:</b>	Dr C M Roney-Dougal			
<b>Lecturer(s)/Tutor(s):</b>	Dr C M Roney-Dougal, Dr C P Bleak, Dr A L Haynes			

MT4507 Classical Mechanics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu			
The object of this module is to introduce students to some of the ideas and mathematical techniques used in understanding the behaviour of dynamical systems that obey Newton's Laws. These notions are arguably the foundations of physics and applied mathematics. The module will include: Newton's laws of motion; conservative forces; central forces; non-inertial/accelerating frames of reference; dynamics of a system of particles; mechanics of a rigid body; Euler's equations; Lagrange's equations; Hamilton's equations.				
<b>Programme module type:</b>	Optional for all programmes in the School			
<b>Pre-requisite(s):</b>	(MT2003 or MT2503 or PH3081) and MT3504	<b>Required for:</b>	PH4032, PH5004	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr A N Wright			
<b>Lecturer(s)/Tutor(s):</b>	Dr A N Wright			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT4508 Dynamical Systems				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu			
This module aims to introduce students to the basic ideas of the modern theory of dynamical systems and to the concepts of chaos and strange attractors. The module will include: period doubling; intermittency and chaos; geometrical approach to differential equations; homoclinic and heteroclinic orbits; Poincaré sections; the Smale horseshoe mapping; centre manifold theory.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	MT3504			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof T Neukirch			
<b>Lecturer(s)/Tutor(s):</b>	Prof T Neukirch			

MT4509 Fluid Dynamics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu			
This module provides an introduction to the theory of incompressible fluid dynamics, which describes the motion of liquids and gases at speeds small compared to the sound speed. Special attention is paid to a precise foundation of the various conservation laws that govern fluid dynamics, as this provides a convenient framework in which to study specific examples as well as extensions of the basic theory.				
<b>Programme module type:</b>	Compulsory for MMath Applied Mathematics. At least two from MT4003, MT4004, MT4509, MT4510 and MT4606 compulsory for MMath Mathematics. Optional for all other programmes in the School.			
<b>Pre-requisite(s):</b>	MT3601	<b>Required for:</b>	MT5809	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> Written Examination = 100% (2-hour final exam = 90%, class test = 10%)			
<b>Module Co-ordinator:</b>	Prof D G Dritschel			
<b>Lecturer(s)/Tutor(s):</b>	Prof D G Dritschel			

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<b>MT4510 Solar Theory</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Mon (odd weeks), Wed and Fri			
The object of this module is to describe the basic dynamic processes at work in the Sun, a subject which is being enlivened by dramatic new results from space missions.				
<b>Programme module type:</b>	Compulsory for MMath Applied Mathematics. At least two from MT4003, MT4004, MT4509, MT4510 and MT4606 compulsory for MMath Mathematics. Optional for all other programmes in the School.			
<b>Pre-requisite(s):</b>	MT3601	<b>Anti-requisite(s):</b>	MT4504, MT5804	
<b>Required for:</b>	MT5810			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof I De Moortel			
<b>Lecturer(s)/Tutor(s):</b>	Prof I De Moortel			

<b>MT4511 Asymptotic Methods</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	9.00 am Mon (even weeks), Tue and Thu			
This module is designed to introduce students to asymptotic methods used in the construction of analytical approximations to integrals and solutions of differential equations.				
<b>Programme module type:</b>	Optional for all programmes in the School			
<b>Pre-requisite(s):</b>	MT3504			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr S E King			
<b>Lecturer(s)/Tutor(s):</b>	Dr S E King			

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MT4513 Fractal Geometry				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	12.00 noon Mon (even weeks), Tue and Thu			
The aim of this module is to introduce the mathematics used to describe and analyse fractals and to show how the theory may be applied to examples drawn from across mathematics and science. The module discusses the philosophy and scope of fractal geometry; and may include topics such as dimension, representation of fractals by iterated function systems, fractals in other areas of mathematics such as dynamical systems and number theory, Julia sets and the Mandelbrot set.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	MT3501 or MT3503 or MT3504	<b>Anti-requisite(s):</b>	MT5813	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof K J Falconer			
<b>Lecturer(s)/Tutor(s):</b>	Prof K J Falconer			

MT4514 Graph Theory				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu			
The aim of this module is to introduce students to the study of graph theory as a tool for representing connections between data. Topics to be covered may include: basic theory and applications, Eulerian graphs, Hamiltonian graphs, planar graphs, spanning trees and applications, networks, matching problems.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	MT3501 or MT3503 or MT3504			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr M Pfeiffer			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Pfeiffer			

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MT4515 Functional Analysis				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon (even weeks), Tue and Thu			
This object of this module is to familiarise students with the basic notions of functional analysis, that is analysis on normed spaces and Hilbert space. The module will cover normed spaces, convergence and completeness, operators, Hilbert spaces and may include topics such as spectral theory and the Hahn-Banach theorem.				
<b>Programme module type:</b>	Optional for all programmes in the School			
<b>Pre-requisite(s):</b>	MT2002 or (MT2501 and MT2502)	<b>Required for:</b>	MT5830	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr C P Bleak			
<b>Lecturer(s)/Tutor(s):</b>	Dr C P Bleak			

MT4516 Finite Mathematics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu			
The aim of this module is to introduce students to some topics in the mathematics of combinatorial structures. This theory has wide applications, both in classical mathematics and in theoretical computer science. Topics to be covered may include: coding theory, finite geometries, Latin squares, designs.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	either pre- or co-requisites - one of MT3501, MT3503, MT3504, MT3606			
<b>Co-requisite(s):</b>	either pre- or co-requisites - one of MT3501, MT3503, MT3504, MT3606	<b>Required for:</b>	MT5826	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr C M Roney-Dougal			
<b>Lecturer(s)/Tutor(s):</b>	Dr C M Roney-Dougal			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT4517 Rings and Fields				
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2014/5			
Planned timetable:	11.00 am Mon (odd weeks), Wed and Fri			
Historically, rings have appeared as generalisations of number systems (integers, in particular) with the intention of gaining deeper insight into number systems themselves. This will be reflected in this module, where students will study familiar concepts, such as factorisation, primeness, divisibility etc., in a new, more general, setting of commutative rings. In addition, the module may include topics from: rings of quotients, finite fields and extensions of fields.				
Programme module type:	Optional for all programmes in the School			
Pre-requisite(s):	MT3600 or (MT2002 and MT3501) or (MT2501 and MT2505)			
Required for:	MT5823, MT5826, MT5827, MT5829, MT5836			
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	Scheduled learning: 35 hours		Guided independent study: 115 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
Module Co-ordinator:	Dr J D Mitchell			
Lecturer(s)/Tutor(s):	Dr J D Mitchell, Dr M Pfeiffer			

MT4519 Number Theory				
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2015/6			
Planned timetable:	10.00 am Mon (even weeks), Tue and Thu			
The aim of this module is to introduce students to some important topics in number theory. Topics to be covered may include: prime numbers, cryptography, continued fractions, Pell's equation, the Gaussian integers and writing numbers as sums of squares.				
Programme module type:	Optional for all programmes in the School.			
Pre-requisite(s):	one of MT3501, MT3503, MT3504			
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	Scheduled learning: 35 hours		Guided independent study: 115 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
Module Co-ordinator:	Dr C P Bleak			
Lecturer(s)/Tutor(s):	Dr C P Bleak			

<b>MT4526 Topology</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	12.00 noon Mon (odd weeks), Wed and Fri			
<p>This module introduces the ideas of metric and topological spaces. A metric space is simply a set together with a 'distance' between any two points. This idea is pervasive in mathematics: from situations such as the usual distance in n-dimensional space, to the Hamming distance between words in an error-correcting code and the distance between functions approximating a given function. Metric spaces can be thought of as particular instances of topological spaces, where the fundamental concept is that of points being 'close' to each other rather than the precise distance between points. Topological spaces are a powerful generalisation of metric spaces, and have had a profound influence in the development of mathematics. Many examples of metric spaces and topological spaces will be introduced and fundamental ideas within topology will be discussed, including separation axioms, compactness and connectedness.</p>				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	MT2002 or MT2502 or MT3600 or MT4004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr J D Mitchell			
<b>Lecturer(s)/Tutor(s):</b>	Dr J D Mitchell			

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MT4527 Time Series Analysis				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon (even weeks), Tue and Thu			
This module provides an introduction to univariate linear times series models (ARIMA processes) and univariate non-linear times-series models (ARCH and GARCH). The syllabus includes: forecasting methods for constant mean and trend models, the ARIMA class of models (including seasonal ARIMA models), fitting and forecasting ARIMA models, ARCH and GARCH processes.				
<b>Programme module type:</b>	MT4527 or MT4608 is compulsory for MMath Statistics. Optional for all other programmes in the School. At least two from MT3706, MT4527, MT4608 compulsory for BSc Management Science (single Honours).			
<b>Pre-requisite(s):</b>	MT2004 or MT2508			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr V M Popov			
<b>Lecturer(s)/Tutor(s):</b>	Dr V M Popov			

MT4530 Population Genetics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	9.00 am Mon (even weeks), Tue and Thu			
This module aims to show how the frequencies of characteristics in large natural populations can be explained using mathematical models and how statistical techniques may be used to investigate model validity. The syllabus includes: Mendel's First and Second Laws, random mating and random union of gametes, Hardy-Weinberg equilibrium, linkage, inbreeding, assortative mating, X-linked loci, selection and mutation.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	MT2004 or MT2508			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr I B J Goudie			
<b>Lecturer(s)/Tutor(s):</b>	Dr I B J Goudie			



**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT4531 Bayesian Inference</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu			
This module is intended to offer a re-examination of standard statistical problems from a Bayesian viewpoint and an introduction to recently developed computational Bayes methods. The syllabus includes Bayes' theorem, inference for Normal samples; univariate Normal linear regression; principles of Bayesian computational, Markov chain Monte Carlo - theory and applications.				
<b>Programme module type:</b>	At least two of MT4531, MT4608 and MT4609 compulsory for BSc Statistics. At least two from MT3706, MT4531, MT4606 - MT4609 compulsory for BSc/MA joint Honours Statistics programmes. Optional for all other programmes in the School.			
<b>Pre-requisite(s):</b>	MT3606	<b>Anti-requisite(s):</b>	MT5831	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 8 tutorials/practical classes over the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Dr M Papathomas			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Papathomas, Dr L Thomas			

<b>MT4537 Spatial Processes</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu			
This module will study probabilistic and inferential problems for spatial processes. It commences with a discussion on different types of spatial data. In the context of spatial point processes functional and non-functional summary characteristics for point patterns are considered. Spatial point process models, including homogeneous and inhomogeneous Poisson processes as well as Gibbs processes and Cox processes along with the approaches to parameter estimation and model evaluation, are introduced. Models in geostatistics based on empirical variograms and kriging approaches and spatial models for lattice data (CAR model, Gauss Markov random fields) are also discussed.				
<b>Programme module type:</b>	Optional for all programmes in the School.			
<b>Pre-requisite(s):</b>	MT3606	<b>Anti-requisite(s):</b>	MT4536	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 4 tutorials over the semester.			
	<b>Scheduled learning:</b> 29 hours		<b>Guided independent study:</b> 121 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr J B Illian			
<b>Lecturer(s)/Tutor(s):</b>	Dr J B Illian			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT4551 Financial Mathematics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (odd weeks), Wed and Fri			
Students are introduced to the application of mathematical models to financial instruments. The course will include an overview of financial markets and the terminology in common usage but the emphasis will be on the mathematical description of risk and return as a means of pricing contracts and options.				
<b>Programme module type:</b>	Compulsory for MSci Applied Quantitative Finance. Optional for all other programmes in the School of Mathematics & Statistics.			
<b>Pre-requisite(s):</b>	(MT2001 or MT2503) and (MT1007 or MT2004 or MT2504 or EC2003) and MT3504			
<b>Required for:</b>	MT5812			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr D H Mackay			
<b>Lecturer(s)/Tutor(s):</b>	Dr D H Mackay, Dr V M Popov			

MT4599 Project in Mathematics / Statistics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students in the final year of a BSc/MA Honours degree programme in the School			
<b>Planned timetable:</b>	none			
The student will choose a project from a list published annually although a topic outwith the list may be approved. Students will be required to report regularly to their supervisor and a report of no more than 5,000 words must be submitted by the end of the April.				
<b>Programme module type:</b>	Compulsory for BSc/MA Mathematics, BSc/MA Statistics, all BSc/MA joint Honours Mathematics programmes (including Mathematics 'with' degrees) and all BSc/MA joint Honours Statistics programmes			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Typically and on average, 20 mins of project supervisions per week over whole year.			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 142 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%: Project = 80%, Presentation = 20%			
<b>Module Co-ordinator:</b>	Prof K J Falconer (Sem. 1), Prof C E Parnell (Sem. 2)			

**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT4606 Statistical Inference</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	10.00 am Mon (odd weeks), Wed and Fri			
<p>This module aims to show how the methods of estimation and hypothesis testing met in MT2004 and MT3606 can be justified and derived; to extend those methods to a wider variety of situations. The syllabus includes: comparison of point estimators; the Rao-Blackwell Theorem; distribution theory; Fisher information and the Cramer-Rao lower bound; maximum likelihood estimation; hypothesis-testing; confidence sets.</p>				
<b>Programme module type:</b>	<p>Compulsory for BSc/MA Statistics                      At least two from MT4003, MT4004, MT4509, MT4510 and MT4606 compulsory for MMath Mathematics                      At least two from MT3706, MT4531, MT4606 - MT4609 compulsory for BSc/MA joint Honours Statistics programmes                      Optional for all other programmes in the School.</p>			
<b>Pre-requisite(s):</b>	MT3606	<b>Anti-requisite(s):</b>	MT3701, MT5701	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr I B J Goudie			
<b>Lecturer(s)/Tutor(s):</b>	Dr I B J Goudie			

Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT4607 Generalised Linear Models and Data Analysis			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	9.00 am Mon (even weeks), Tue and Thu		
This module aims to demonstrate the power and elegance of unifying a large number of simple statistical models within the general framework of the generalised linear model. It will train students in the interpretation, analysis and reporting of data, when a single response measurement is interpreted in terms of one or a number of other variables.			
<b>Programme module type:</b>	Compulsory for BSc/MA Statistics. At least two from MT3706, MT4531, MT4606 - MT4609 compulsory for BSc/MA joint Honours Statistics programmes. Optional for all other programmes in the School.		
<b>Pre-requisite(s):</b>	(MT2001 or MT2503), (MT2004 or MT2508) and either pre- or co-requisite MT3501	<b>Anti-requisite(s):</b>	MT5753
<b>Co-requisite(s):</b>	or pre-requisite MT3501	<b>Required for:</b>	MT5757
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 8 tutorials over the semester		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework: Project = 20%		
<b>Module Co-ordinator:</b>	Dr R Langrock		
<b>Lecturer(s)/Tutor(s):</b>	Dr R Langrock		

**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT4608 Sampling Theory</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (odd weeks), Wed and Fri			
<p>The aims of this module are to introduce students to and interest them in the principles and methods of design-based inference, to convince them of the relevance and utility of the methods in a wide variety of real-world problems, and to give them experience in applying the principles and methods themselves. By the end of the module students should be able to recognise good and poor survey design and analysis, to decide upon and implement the main types of survey design in relatively straightforward settings, and analyse the resulting survey data appropriately. The syllabus includes fundamentals of design based vs model-based inference, simple random sampling, sampling with replacement, ratio and regression estimators, stratified sampling, cluster sampling and unequal probability sampling.</p>				
<b>Programme module type:</b>	<p>MT4527 or MT4608 is compulsory for MMath Statistics.                      At least two of MT4531, MT4608 and MT4609 are compulsory for BSc Statistics.                      At least two from MT3706, MT4531, MT4606 - MT4609 are compulsory for BSc/MA joint Honours Statistics programmes.                      Optional for all other programmes in the School.                      At least two from MT3706, MT4527, MT4608 are compulsory for BSc Management Science (single Honours).</p>			
<b>Pre-requisite(s):</b>	MT2004 or MT2508			
<b>Co-requisite(s):</b>	either pre or co-requisite: One of MT3501, MT3503, MT3504, MT3606 or any 3000-level MN module			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 8 tutorials over the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 85%, Practical Examinations = 0%, Coursework = 15%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 85%, Coursework: Project = 15%			
<b>Module Co-ordinator:</b>	Dr J B Illian			
<b>Lecturer(s)/Tutor(s):</b>	Dr J B Illian, Dr V M Popov			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT4609 Multivariate Analysis				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (odd weeks), Wed and Fri			
This module aims to introduce students to the ideas and techniques of multivariate statistical analysis. The syllabus includes mean vectors, covariance matrices, correlation matrices; basic properties of multivariate normal distributions; checking multivariate normality; the likelihood ratio and union-intersection principles for constructing multivariate tests; the one-sample and two-sample Hotelling's T-squared tests; tests on covariance matrices, tests of independence; linear discriminant analysis; principal components analysis; canonical correlation.				
<b>Programme module type:</b>	At least two of MT4531, MT4608 and MT4609 are compulsory for BSc Statistics. At least two from MT3706, MT4531, MT4606 - MT4609 are compulsory for BSc/MA joint Honours Statistics programmes. Optional for all other programmes in the School.			
<b>Pre-requisite(s):</b>	MT3606			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr I B J Goudie			
<b>Lecturer(s)/Tutor(s):</b>	Dr I B J Goudie			

MT4614 Design of Experiments				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	9.00 am Mon (odd weeks), Wed and Fri			
This module introduces a wide range of features that occur in real comparative experiments, such as choice of blocks and replication as well as type of design. It includes enough about the analysis of data from experiments to show what has to be considered at the design stage. It includes consultation with the scientist and interpretation of the results.				
<b>Programme module type:</b>	Optional for all programmes in the School (including MSc programmes).			
<b>Pre-requisite(s):</b>	(MT2004 or MT2508) and MT3501			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and either tutorial or practical (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 10%, Coursework = 10%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Presentation = 10%, Coursework = 10%			
<b>Module Co-ordinator:</b>	Prof R A Bailey			
<b>Lecturer(s)/Tutor(s):</b>	Prof R A Bailey			

MT5611 Advanced Symbolic Computation				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	9.00 am Mon (odd weeks), Wed and Fri			
<p>This module aims to enable students to use Maple as a tool in their other modules and to turn naturally to such a package when solving mathematical problems. The module aims to illustrate the following points: a symbolic computation package allows one to conduct mathematical experiments; a symbolic computation package allows one to collect data about a problem being studied. This is similar to the way other scientists work. It is easier to try several different approaches to a problem and see which works. The machine is stupid. Intelligence comes from the user. The user thinks, the user interprets, the computer calculates. Students will undertake a more substantial project than that required for MT4111.</p>				
<b>Programme module type:</b>	<p>At least one of MT4111, MT4112 and MT5611 compulsory for MMath Applied Mathematics and MMath Pure Mathematics.                      At least one of MT3607, MT4111, MT4112 and MT5611 compulsory for MMath Mathematics.                      Optional for all other undergraduate programmes in the School.</p>			
<b>Pre-requisite(s):</b>	at least one MT4000-level module			
<b>Anti-requisite(s):</b>	MT4111			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 practical session (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 165 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 55%, Coursework: Project = 45%			
<b>Module Co-ordinator:</b>	Dr J D Mitchell			
<b>Lecturer(s)/Tutor(s):</b>	Dr J McDermott, Dr J D Mitchell, Dr C M Roney-Dougal			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5701 Advanced Statistical Inference				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2015/6			
<b>Planned timetable:</b>	10.00 am Mon (odd weeks), Wed and Fri			
This module consists of MT4606 with the addition of directed reading on more advanced aspects of the subject and a requirement to write a review essay on an aspect of the subject. The syllabus includes: comparison of point estimators; the Rao-Blackwell Theorem; distribution theory; Fisher information and the Cramer-Rao lower bound; maximum likelihood estimation; hypothesis-testing; confidence sets.				
<b>Programme module type:</b>	MT5701 or MT5831 is compulsory for MMath Statistics Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT3606 and any MT4000-level module			
<b>Anti-requisite(s):</b>	MT4606			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework: Project = 25%			
<b>Module Co-ordinator:</b>	Dr I B J Goudie			
<b>Lecturer(s)/Tutor(s):</b>	Dr I B J Goudie			



**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT5751 Estimating Animal Abundance</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon(odd), Wed, Fri			
<p>The module will introduce students to the main types of survey method for wildlife populations. It will cover simple methods in some detail and provide students with a conceptual framework for building understanding of more advanced methods. By the end of the course, students will be able to identify an appropriate assessment method for a given population, be able to design a simple survey to assess the population, and perform simple analyses of survey data. Students will get experience in using the methods via computer practical sessions involving design and analyses of surveys conducted by computer simulation.</p>				
<b>Programme module type:</b>	<p>At least two of MT5751, MT5752, MT5757, MT5758 and ID5059 compulsory for MMath Statistics.</p> <p>At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics.</p> <p>Optional module for all other undergraduate programmes in the School.</p>			
<b>Pre-requisite(s):</b>	MT3606 and any MT4000-level module			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hrs lecture, 1 hr practical, 0.5 hr tutorial (weeks 1 - 10)			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof D L Borchers			
<b>Lecturer(s)/Tutor(s):</b>	Prof D L Borchers			

Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5753 Statistical Modelling			
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	2.00 pm		
<p>This module will introduce the main ideas of linear and generalised linear statistical modelling and will provide training in applied statistical modelling. The module structure is as follows: what statistical models are and what they are for; distributions, point and interval estimation and hypothesis testing; simple linear regression models for normal data; multiple regression; multiple regression with qualitative explanatory variables; less linear models for non-normal data; generalised linear models. Lectures will be built around the book 'An Introduction to Statistical Modelling' (Krzanowski, 1998), which closely matches what we believe to be an ideal course structure.</p>			
<b>Programme module type:</b>	Also part of MMath programme		
<b>Pre-requisite(s):</b>	at least one MT4000-level module		
<b>Anti-requisite(s):</b>	MT4607	<b>Required for:</b>	MT5755, MT5757
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 hours lectures, 1.5 hours tutorials and 6 hours practicals (x 4 weeks).		
	<b>Scheduled learning:</b> 54 hours	<b>Guided independent study:</b> 146 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Dr M L MacKenzie		
<b>Lecturer(s)/Tutor(s):</b>	Dr M L MacKenzie, Dr L Thomas		

**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

<b>MT5757 Advanced Data Analysis</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu			
<p>This module covers modern modelling methods for situations where the data fails to meet the assumptions of common statistical models and simple remedies do not suffice. This represents a lot of real world data. Methods covered include: nonlinear models; basic splines and Generalised Additive Models; Ridge Regression and Principal Components Regression; models for non-independent errors and random effects. Pragmatic data imputation is covered with associated issues. Computer intensive inference is considered throughout. Practical applications build sought-after skills in the commercial packages SAS.</p>				
<b>Programme module type:</b>	<p>At least two of MT5751, MT5752, MT5757, MT5758 and ID5059 compulsory for MMath Statistics.</p> <p>At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics.</p> <p>Optional for all other undergraduate programmes in the School.</p>			
<b>Pre-requisite(s):</b>	MT4607 or MT5753			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 8 tutorials over the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 167 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M L MacKenzie			
<b>Lecturer(s)/Tutor(s):</b>	Dr M L MacKenzie			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5758 Applied Multivariate Analysis				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Mon (even weeks), Tue and Thu			
<p>This module provides introductory and advanced training in the applied analysis of multivariate data. The module emphasis is upon practical analysis of data and the extraction of answers from real-life data. Basic theory is given covering matrix algebra, metrics and general measures of similarity. The most common and fundamental methods including dimension reduction and classification are covered e.g. Multivariate Analysis of Variance, Principal Components Analysis, multidimensional scaling, Factor Analysis, clustering methods. The practical component of the module focuses on analysis of real data using the commercial software tools Excel, SAS and SPSS.</p>				
<b>Programme module type:</b>	<p>At least two of MT5751, MT5752, MT5757, MT5758 and ID5059 compulsory for MMath Statistics.</p> <p>At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics.</p> <p>Optional for all other undergraduate programmes in the School.</p>			
<b>Pre-requisite(s):</b>	Acceptance on to MMath Statistics or MMath Mathematics programmes, or taught postgraduate programme.			
<b>Anti-requisite(s):</b>	MT4609			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10), and 4 tutorials and 4 project group meetings over the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J B Illian			
<b>Lecturer(s)/Tutor(s):</b>	Dr J B Illian			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5802 Advanced Analytical Techniques				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon (odd weeks), Wed and Fri			
This module introduces students to some further important applied analytic techniques such as Variational Calculus, Integral equations and transforms, and the theory of Steepest Descent.				
<b>Programme module type:</b>	At least three from MT5802, MT5806, MT5809, MT5810 and MT5990 compulsory for MMath Applied Mathematics. At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT3503.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 165 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr C V Tran			
<b>Lecturer(s)/Tutor(s):</b>	Dr C V Tran			

MT5806 Advanced Computational Techniques				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon (even weeks), Tue and Thu			
This module introduces students to some of the ideas, techniques and constraints that underpin modern approaches to the numerical modeling of physical processes that may be described by partial differential equations. Students will gain expertise in implementing standard methods and will submit a short dissertation together with a portfolio of computational work.				
<b>Programme module type:</b>	At least three from MT5802, MT5806, MT5809, MT5810 and MT5990 compulsory for MMath Applied Mathematics. At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT3802 and MT4112.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (weeks 1 - 10) and a typical average of 0.5 hours of project supervisions (weeks 2 - 11)			
	<b>Scheduled learning:</b> 25 hours		<b>Guided independent study:</b> 175 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S J Brooks			
<b>Lecturer(s)/Tutor(s):</b>	Dr S J Brooks			

Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5809 Advanced Fluid Dynamics			
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Planned timetable:</b>	11.00 am Mon (odd weeks), Wed and Fri		
<p>This module will examine current research in fluid dynamics, with a particular focus on meteorology and oceanography. The large-scale atmosphere and oceans behave quite unlike a 'classical' fluid owing to the presence of stable density stratification and rotation. As a result, the fluid motion is dominated by slow, 'vortical' or eddying motions (like cyclones) which generally spin slower than the Earth. Superimposed on this slow motion are relatively fast wave-like motions analogous to surface waves on a pond. These lectures describe the mathematical basis of these fundamentally different types of motion, and furthermore illustrate the increasingly important role of computer modelling in this research.</p>			
<b>Programme module type:</b>	<p>At least three from MT5802, MT5806, MT5809, MT5810 and MT5990 compulsory for MMath Applied Mathematics.</p> <p>At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics.</p> <p>Optional for all other undergraduate programmes in the School.</p>		
<b>Pre-requisite(s):</b>	MT4509		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 165 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 100%		
<b>Module Co-ordinator:</b>	Prof D G Dritzchel		
<b>Lecturer(s)/Tutor(s):</b>	Prof D G Dritzchel		

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5810 Advanced Solar Theory				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	12.00 noon Mon (even weeks), Tue and Thu			
The object of this module is to describe the magnetohydrodynamic processes at work in the Sun, using modern techniques of applied mathematics, and to discuss the latest theories in relation to aspects of current research within the School.				
<b>Programme module type:</b>	At least three from MT5802, MT5806, MT5809, MT5810 and MT5990 compulsory for MMath Applied Mathematics. At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT4510.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 165 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof T Neukirch			
<b>Lecturer(s)/Tutor(s):</b>	Prof T Neukirch			

MT5812 Advanced Financial Mathematics				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	2.00 pm Tue and Fri			
This module builds on the theory that has been taught in MT4551 by introducing further analytical and practical techniques that are used in the valuation and risk-management of all the mainstream vanilla and exotic derivatives in the Equity, Foreign Exchange, Fixed Income and Credit Markets. The focus will be on both understanding the theory as well as how it is applied in the real world environment of a derivatives trading desk. By means of lectures and practical assignments, students will also be introduced to Excel and the Visual Basic Programming language (as a working knowledge of these will be invaluable to anyone seeking a career in the areas of finance or business).				
<b>Programme module type:</b>	Optional for all programmes in the School of Mathematics & Statistics.			
<b>Pre-requisite(s):</b>	MT4551.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr W R Campbell			
<b>Lecturer(s)/Tutor(s):</b>	Dr W R Campbell			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5821 Advanced Combinatorics				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Academic year:	2014/5			
Planned timetable:	12.00 noon Mon (odd weeks), Wed & Fri			
Combinatorics underlies and interacts many topics in discrete mathematics including group theory, statistical design, and statistical mechanics, as well as being a lively subject in its own right. The module will give students a good grounding in the techniques and will engage students with research-level problems. It is designed to make a wide area of combinatorics available to students.				
Programme module type:	At least three from MT5821, MT5823 – MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics. At least 60 credits from MT5751 – MT5753, MT575 – MT5759, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 – MT5830, MT5836, MT5990 and ID5059 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
Pre-requisite(s):	MT4514 or MT4516			
Learning and teaching methods and delivery:	<b>Weekly contact:</b> 2.5-hour lectures (weeks 1 - 10) and 1-hour tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 165 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 100%			
Module Co-ordinator:	Prof P J Cameron			
Lecturer(s)/Tutor(s):	Prof P J Cameron			

MT5823 Semigroups				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Academic year:	2015/6			
Planned timetable:	9.00 am Mon (odd weeks), Wed and Fri			
The general aim of this module is to introduce students to semigroup theory, which is the study of sets with one associative binary operation defined on them. In the process, the common aims and concerns of abstract algebra will be emphasised and illustrated by drawing comparisons between semigroups, groups and rings.				
Programme module type:	At least three from MT5821, MT5823 – MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics. At least 60 credits from MT5751 – MT5753, MT575 – MT5759, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 – MT5830, MT5836, MT5990 and ID5059 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
Pre-requisite(s):	MT4003 or MT4517			
Learning and teaching methods and delivery:	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10), 1 tutorial and 1 examples class (weeks 2 - 11).			
	<b>Scheduled learning:</b> 45 hours		<b>Guided independent study:</b> 155 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
Module Co-ordinator:	Prof N Ruskuc			
Lecturer(s)/Tutor(s):	Prof N Ruskuc			



## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5824 Topics in Groups				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (odd weeks), Wed and Fri			
The overall aim of this module is to build on the foundations established in MT4003/MT4603, and take the students further into this important and beautiful branch of mathematics. More specifically, through a selection of topics, some of which will be of current research interest in St Andrews, it will introduce students to advanced techniques of handling groups and classifying them.				
<b>Programme module type:</b>	At least three from MT5821, MT5823 – MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics. At least 60 credits from MT5751 – MT5753, MT575 – MT5759, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 – MT5830, MT5836, MT5990 and ID5059 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT4003.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10), 1 tutorial and 1 examples class (weeks 2 - 11).			
	<b>Scheduled learning:</b> 45 hours		<b>Guided independent study:</b> 155 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr C P Bleak			
<b>Lecturer(s)/Tutor(s):</b>	Dr C P Bleak			

MT5825 Measure and Ergodic Theory				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu			
This module introduces some of the powerful techniques and ideas of modern mathematical analysis that are important both in analysis in its own right and in its many applications in mathematics and science. The module will include topics such as: measure theory, the ergodic theorem, martingale theory. Analysis is one of the active research areas within the School, and the choice of topics will reflect current activity.				
<b>Programme module type:</b>	At least three from MT5821, MT5823 – MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics. At least 60 credits from MT5751 – MT5753, MT575 – MT5759, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 – MT5830, MT5836, MT5990 and ID5059 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT4004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 165 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Prof L Olsen			
<b>Lecturer(s)/Tutor(s):</b>	Prof L Olsen			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5827 Lie Algebras				
SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2015/6			
Planned timetable:	11.00 am Mon (odd weeks), Wed and Fri			
The aim of this module is to classify the semi-simple Lie algebras over an algebraically closed field. Lie algebra has important applications to theoretical physics and is used in the classification of finite simple groups.				
Programme module type:	At least three from MT5821, MT5823 – MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics. At least 60 credits from MT5751 – MT5753, MT575 – MT5759, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 – MT5830, MT5836, MT5990 and ID5059 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
Pre-requisite(s):	MT3501 and (MT4003 or MT4517)	Anti-requisite(s):		
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	Scheduled learning: 35 hours		Guided independent study: 165 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 100%			
Module Co-ordinator:	Dr M Pfeiffer			
Lecturer(s)/Tutor(s):	Dr M Pfeiffer			

MT5830 Topics in Geometry and Analysis				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Academic year:	2014/5			
Planned timetable:	10.00 am Mon (odd weeks), Wed and Fri			
The module will present new developments in geometry and analysis that relate to research interests in St Andrews. Building on 4000-level modules in analysis, it will introduce students to advanced results in this beautiful and important area of mathematics. The choice of specific topics may vary from year to year but will be chosen from Geometric Measure Theory, Non-commutative Geometry, Fuchsian Groups, Harmonic Analysis, and Measurable Dynamics.				
Programme module type:	At least three from MT5821, MT5823 – MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics. At least 60 credits from MT5751 – MT5753, MT575 – MT5759, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 – MT5830, MT5836, MT5990 and ID5059 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
Pre-requisite(s):	MT4004 or MT4515.	Anti-requisite(s):	MT5828	
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
	Scheduled learning: 35 hours		Guided independent study: 165 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 100%			
Module Co-ordinator:	Dr M Todd			
Lecturer(s)/Tutor(s):	Dr M Todd			

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5831 Advanced Bayesian Inference				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	10.00 am Mon (even weeks), Tue and Thu			
<p>This module consists of MT4531 with an additional project which will give consideration to some more advanced aspects of the theory or to the application of Bayesian techniques. This may involve either directed reading or the use of the computer for simulation or data-based analyses. The syllabus includes Bayes' theorem, inference for Normal samples; univariate Normal linear regression; principles of Bayesian computational, Markov chain Monte Carlo - theory and applications.</p>				
<b>Programme module type:</b>	MT5701 or MT5831 is compulsory for MMath Statistics. Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT3606.	<b>Anti-requisite(s):</b>	MT4531	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 8 tutorials/practical classes over semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 167 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M Papathomas			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Papathomas, Dr L Thomas			

MT5836 Galois Theory				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Planned timetable:</b>	11.00 am Mon (odd weeks), Wed and Fri			
<p>Galois theory is one of the most beautiful areas of mathematics, establishing a remarkable connection between the theory of polynomial equations and their roots and group theory. The subject brings together ideas from the theory of groups and fields in a powerful way, culminating in Galois' fundamental theorem. There are many applications of the work, for example demonstrating that certain ruler and compass constructions are impossible, and that there is no general formula for the solution of quintic equations.</p>				
<b>Programme module type:</b>	At least three from MT5821, MT5823 – MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics. At least 60 credits from MT5751 – MT5753, MT575 – MT5759, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 – MT5830, MT5836, MT5990 and ID5059 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.			
<b>Pre-requisite(s):</b>	MT4517	<b>Anti-requisite(s):</b>	MT5826	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2.5 lectures (weeks 1 - 10) and 10 tutorials/practical classes over semester.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 165 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr S Huczynska			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Huczynska, Dr C Roney-Dougal			

**Mathematics & Statistics - Honours Level - 2014/15 - August 2014**

MT5990 Independent Study Module				
<b>SCOTCAT Credits:</b>	20	SCQF Level 11	<b>Semester:</b>	1 or 2
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students on an MMath, MPhys or MSc degree programme in the School			
<b>Planned timetable:</b>	To be arranged.			
This module provides the opportunity for a student to study an Advanced topic as a reading course under the supervision of a member of staff. The topic will be disjoint from those available in other modules.				
<b>Programme module type:</b>	<p>At least three from MT5802, MT5806, MT5809, MT5810 and MT5990 compulsory for MMath Applied Mathematics.</p> <p>At least three from MT5823 - MT5830 and MT5990 compulsory for MMath Pure Mathematics.</p> <p>At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830 and MT5990 compulsory for MMath Mathematics.</p> <p>Optional for MMath Statistics and MPhys Mathematics and Theoretical Physics</p>			
<b>Pre-requisite(s):</b>	Permission from the Head of School			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Typically 1 hour project supervisions.			
	<b>Scheduled learning:</b> 12 hours		<b>Guided independent study:</b> 188 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M R Quick			
<b>Lecturer(s)/Tutor(s):</b>				

## Mathematics & Statistics - Honours Level - 2014/15 - August 2014

MT5991 Professional Skills for Mathematical Scientists				
<b>SCOTCAT Credits:</b>	30	SCQF Level 11	<b>Semester:</b>	Whole Year
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students on an MSc Postgraduate programme or, exceptionally, on an MMath or MPhys Honours degree programme in the School			
<b>Planned timetable:</b>	To be arranged.			
This module encompasses a range of skills, both generic and topic specific, together with taught components aimed at providing an appreciation of both breadth and depth of research areas in Pure or Applied Mathematics. The precise programme of study, together with the identification of the relevant software expertise required, will be determined in consultation with the student's supervisor.				
<b>Programme module type:</b>	Optional for all taught postgraduate programmes within the School of Mathematics & Statistics. In exceptional circumstances and with the approval of the Head of School, optional for final year of MMath Programme.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies. Typically 1 project supervision per week over whole year.			
	<b>Scheduled learning:</b> 24 hours		<b>Guided independent study:</b> 276 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof T Neukirch			
<b>Lecturer(s)/Tutor(s):</b>	n/a			

MT5999 Advanced Project in Mathematics / Statistics				
<b>SCOTCAT Credits:</b>	40	SCQF Level 11	<b>Semester:</b>	Whole Year
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students in the final year of an MMath or MPhys Honours programme in the School			
<b>Planned timetable:</b>	To be arranged.			
This is a more substantial project which, for MMath students, will replace the existing Honours project. The project will be chosen from an approved list of topics. The student will be required to investigate a topic in some depth, submit a report by the end of April and give a presentation.				
<b>Programme module type:</b>	Compulsory for MMath Applied Mathematics, MMath Mathematics, MMath Pure Mathematics and MMath Statistics. Either MT5999 or PH5102 is compulsory for MPhys Mathematics and Theoretical Physics.			
<b>Pre-requisite(s):</b>	Entry to an MPhys or MMath programme			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Typically and on average, 40 mins of project supervisions per week over whole year			
	<b>Scheduled learning:</b> 16 hours		<b>Guided independent study:</b> 384 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%: Project = 80%, Presentation = 20%			
<b>Module Co-ordinator:</b>	Prof K Falconer (Sem 1), Prof C E Parnell (Sem 2)			



School of Medicine

Medicine (MD) modules

MD3001 Medicine: Honours 1 (Cardiovascular and Respiratory Systems)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students enrolled in the BSc Honours Medicine programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>Medical Science Honours 1 and 2 form the second turn of the curriculum spiral taking an integrated approach to the scientific basis of medicine at an Honours level. These modules will build upon the material delivered in the preceding Foundations of Medicine 1 and 2 modules. Medicine Honours 1 will cover the structure and functions of the cardiovascular and respiratory systems. The anatomy of the thorax will be studied by dissection. The disease mechanisms and therapy of disorders pertinent to these body systems will be introduced and relevant clinical problems and clinical skills will provide clinical context. The ethical, moral and behavioural aspects relevant to these systems will be discussed.</p>				
<b>Programme module type:</b>	Compulsory for BSc Honours Medicine			
<b>Pre-requisite(s):</b>	MD2001 and MD2002	<b>Required for:</b>	MD4001, MD4002, MD4003	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 Lectures and 6 hours of seminars/tutorials/practicals each week. Clinical case studies and clinical skills on a 2-week cycle including 5 day placements in clinical settings. Up to 6 hours per week of directed self-learning			
	<b>Scheduled learning:</b> 304 hours		<b>Guided independent study:</b> 296 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> Module Examinations will comprise 2 written examinations totaling 75% of the module grade. Attainment of competence in clinical skills appropriate for this module (Pass/Fail). Coursework will comprise written examinations totaling 25% of the module grade.			
<b>Module Co-ordinator:</b>	Dr A Fleet and Dr W Dhaliwal			

Medicine - Honours Level - 2014/15 - August 2014

MD3002 Medicine: Honours 2 (Reproductive, Renal and Gastrointestinal Systems)			
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Available only to students enrolled in the BSc Honours Medicine programme.		
<b>Planned timetable:</b>	To be arranged.		
Medicine Honours 2 will: - provide in depth coverage of the structure and functions of the reproductive, renal and gastrointestinal systems. The anatomy of the abdomen and pelvis will be studied by dissection. - cover the disease mechanisms and therapy of the disorders pertinent to these body systems - use relevant clinical problems to provide the clinical context - will integrate the ethical, moral and behavioural aspects relevant to these systems.			
<b>Programme module type:</b>	Compulsory for BSc Honours Medicine		
<b>Pre-requisite(s):</b>	MD2001 and MD2002	<b>Required for:</b>	MD4001, MD4002, MD4003
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 Lectures and 6 hours of seminars/tutorials/practicals each week. Clinical case studies and clinical skills on a 2-week cycle including 5 day placements in clinical settings. Up to 6 hours per week of directed self-learning.		
	<b>Scheduled learning:</b> 258 hours	<b>Guided independent study:</b> 342 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	<b>As used by St Andrews:</b> Module Examinations will comprise 2 written examinations totaling 75% of the module grade. Attainment of competence in clinical skills appropriate for this module (Pass/Fail). Coursework will comprise 2 written examinations totaling 25% of the module grade.		
<b>Module Co-ordinator:</b>	Dr J P Issberner, Dr A Laidlaw		



MD4001 Medicine: Honours 3 (Central Nervous System and Endocrine System)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students enrolled in the BSc Honours Medicine programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module continues the strategy of the spiral curriculum by revisiting foundation knowledge and progressing to the most complex integrative physiological systems namely the central nervous and endocrine systems. Medicine Honours 3 will: - provide in depth coverage of normal structure and function of the CNS and endocrine systems - study the anatomy of the head and neck by dissection - introduce diseases and possible therapies pertinent to these important control systems - present case studies associated with the CNS and endocrine systems to highlight appropriate clinical skills for the identification of neurological and endocrinological disorders - utilise audiovisual, literary and theoretical works to integrate ethical issues and behavioural science with clinical medicine.</p>				
<b>Programme module type:</b>	Compulsory for BSc Honours Medicine			
<b>Pre-requisite(s):</b>	MD3001 and MD3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 Lectures and 6 hours of seminars/tutorials/practicals each week Clinical case studies and clinical skills on a 2-week cycle including 5 day placements in clinical settings. Up to 6 hours per week of directed self-learning.			
	<b>Scheduled learning:</b> 304 hours		<b>Guided independent study:</b> 296 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> Module Examinations will comprise 2 written examinations totaling 75% of the module grade. Attainment of competence in clinical skills appropriate for this module (Pass/Fail). Coursework will comprise 2 written examinations totaling 25% of the module grade.			
<b>Module Co-ordinator:</b>	Dr R Davies, Dr M Andrews			

## Medicine - Honours Level - 2014/15 - August 2014

MD4002 Medicine: Honours 4 (Student-selected component)				
<b>SCOTCAT Credits:</b>	40	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students enrolled in the BSc Honours Medicine programme.			
<b>Planned timetable:</b>	To be arranged.			
Students will undertake an Honours level Student-Selected Component (SSC) research project. This SSC will enable students to pursue an area of their own particular interest at an advanced level. SSCs will involve one of the following: - lab/data based research project assessed by dissertation and oral presentation – critical review project assessed by dissertation and oral presentation.				
<b>Programme module type:</b>	Compulsory for B.Sc Honours Medicine			
<b>Pre-requisite(s):</b>	MD3001 and MD3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> To be arranged.			
	<b>Scheduled learning:</b> 5 hours		<b>Guided independent study:</b> 395 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 90%, Practical Examinations = 10%, Coursework = 0%			
	<b>As used by St Andrews:</b> Lab/data based research or critical review project assessed by dissertation (90%) and oral presentation (10%).			
<b>Module Co-ordinator:</b>	Prof L S Kent, Mrs V O'Carroll			

MD4003 Medicine: Honours 5 (Applied Medical Science)				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students enrolled in the BSc Honours Medicine programme.			
<b>Planned timetable:</b>	To be arranged.			
This module is delivered in small group format, and runs in parallel with the student selected module MD4002 in the second semester. Over the semester individual student contact hours are 25 delivered in 5 cycles. Each student attends for one full day every two weeks. The morning is divided into three parts: integrated clinical scenarios, and a combination of two of the following; a revision tutorial, workshop or skills practical. The afternoon is divided into two parts: feedback from morning's work and a further session which may be a simulation exercise, workshop or practical. The feedback session enables students to improve their performance and also includes discussion relating to the simulated cases. New advanced skills are introduced to stimulate clinical development. Skills include ABCDE approach to patient management, breast examination, cannulation and fluid management. Clinical decision making and problem reasoning workshops are designed to develop clinical reasoning powers. The series of revision topics relate to patient investigations such as haematology, clinical chemistry and ECG. Anatomy relating to clinical examination and imaging is also reviewed. Revisiting these topics in a spiral curriculum reinforces areas previously covered.				
<b>Programme module type:</b>	Compulsory for B.Sc Honours Medicine			
<b>Pre-requisite(s):</b>	MD3001 and MD3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 5 hours in 5 cycles over the semester.			
	<b>Scheduled learning:</b> 50 hours		<b>Guided independent study:</b> 150 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 100%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1 Objectively Structured Clinical Exam (OSCE) of 2 hours duration (100%)			
<b>Module Co-ordinator:</b>	Dr P Bjeloglic, Dr E Sinclair			

## School of Modern Languages

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Arabic (AR) modules

AR3401 Media Arabic 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	Wed 12.00 - 1.00 pm, Thu 12.00 - 1.00 pm			
This module consolidates the grammar and vocabulary learned during Sub-Honours by introducing students to the language of the Arabic media through texts, audio and audio-visual material. Students will be offered basic training in comprehension and translation of contemporary Media Arabic in both directions, and will also compose their own written material and give oral presentations in Arabic.				
<b>Programme module type:</b>	Compulsory module for Arabic			
<b>Pre-requisite(s):</b>	AR2001 and AR2002	<b>Anti-requisite(s):</b>	AR3201	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours - mixture of lectures, seminars and tutorials and 1 surgery hour			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr F Caiani			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Caiani			

AR3402 Media Arabic 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	Wed 12.00 - 1.00 pm, Thu 12.00 - 1.00 pm			
This module consolidates the grammar and vocabulary learned during Junior Honours semester 1, through the systematic analysis of the language of the Arabic media. Contemporary texts, audio and audio-visual material will be used. Students will be offered basic training in comprehension and translation of Media Arabic in both directions, and will also compose their own written material and give oral presentations in Arabic.				
<b>Programme module type:</b>	Compulsory for Arabic			
<b>Pre-requisite(s):</b>	AR2001 and AR2002, AR3401 or Study Abroad	<b>Anti-requisite(s):</b>	AR3201	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours - mixture of lectures, seminars and tutorials and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr F Caiani			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Caiani, Dr O Elmaz			

## Modern Languages - Honours Level - 2014/15 - August 2014

AR3421 Arabic Short Stories 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Wed, 11.00 am Thu			
This module will study linguistic, literary and cultural aspects of Arabic literary writing with readings from modern Arabic short stories. The module is designed to improve and broaden students' knowledge of Arabic while also including a more analytical and cultural component. Students will be required to translate passages of text and comment on difficulties of literary translation, in the context of a background understanding of the literary and cultural dimensions of the texts.				
<b>Programme module type:</b>	Optional for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002	<b>Anti-requisite(s):</b>	AR3206	
<b>Co-requisite(s):</b>	AR3401			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Ms C Cobham			
<b>Lecturer(s)/Tutor(s):</b>	Ms C Cobham			

AR3422 Arabic Short Stories 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Wed, 11.00 am Thu			
This module will study linguistic, literary and cultural aspects of Arabic literary writing with readings from modern Arabic short stories. The module is designed to improve and broaden students' knowledge of Arabic while also including a more analytical and cultural component. Students will be required to translate passages of text and comment on difficulties of literary translation, in the context of a background understanding of the literary and cultural dimensions of the texts.				
<b>Programme module type:</b>	Optional for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or study abroad in Semester 1			
<b>Co-requisite(s):</b>	AR3402	<b>Anti-requisite(s):</b>	AR3206	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Ms C Cobham			
<b>Lecturer(s)/Tutor(s):</b>	Ms C Cobham			

AR3461 Key Texts in Classical Arabic Literature and Culture 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm Mon, 2.00 pm Thu			
The module aims to enable students to understand the development and terminology of aspects of classical Arabic scholarship, to help them understand the structures that underpin the Arabic language, and to support them through encounters with a representative selection of important classical Arabic sources.				
<b>Programme module type:</b>	Optional for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002	<b>Anti-requisite(s):</b>	AR3250	
<b>Co-requisite(s):</b>	AR3401			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours (lectures, seminars and tutorials) and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr O Elmaz			
<b>Lecturer(s)/Tutor(s):</b>	Dr O Elmaz			

AR3462 Key Texts in Classical Arabic Literature and Culture 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm Mon, 2.00 pm Thu			
The module aims to enable students to understand the development and terminology of aspects of classical Arabic scholarship, to help them understand the structures that underpin the Arabic language, and to support them through encounters with a representative selection of important classical Arabic sources.				
<b>Programme module type:</b>	Optional for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or Study Abroad in Semester 1			
<b>Co-requisite(s):</b>	AR3402	<b>Anti-requisite(s):</b>	AR3250	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours (lectures, seminars and tutorials) and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr O Elmaz			
<b>Lecturer(s)/Tutor(s):</b>	Dr O Elmaz			

## Modern Languages - Honours Level - 2014/15 - August 2014

AR4401 Advanced Arabic 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 or 4.00 pm Mon, 3.00 or 4.00 pm Thu			
This module will build upon the skills gained in the third year modules in Arabic. Emphasis will be placed on Arabic grammar, translation into and out of Arabic and free composition in Arabic. Students will also give oral presentations in Arabic. A variety of modern and contemporary materials representing different facets of Arab culture will be used to broaden students' knowledge of the language.				
<b>Programme module type:</b>	Compulsory for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401, AR3402 or study abroad	<b>Anti-requisite(s):</b>	AR4205	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical (Oral Presentation) = 10%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Ms C Cobham			
<b>Lecturer(s)/Tutor(s):</b>	Ms C Cobham, Dr F Caiani, Ms D Al Afranji, Mr M Whitehouse			

AR4402 Advanced Arabic 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	3.00 pm or 4.00 pm Mon, 3.00 pm or 4.00 pm Thu			
This module will build upon the skills gained in AR4401. Emphasis will be placed on Arabic grammar, translation into and out of Arabic and free composition in Arabic. Students will also give oral presentations in Arabic. A variety of modern and contemporary materials representing different facets of Arab culture will be used to broaden students' knowledge of the language.				
<b>Programme module type:</b>	Compulsory for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad, AR4401			
<b>Anti-requisite(s):</b>	AR4205			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical (Oral Presentation) = 10%, Coursework = 30%			
<b>Module Co-ordinator:</b>	Ms C Cobham			
<b>Lecturer(s)/Tutor(s):</b>	Ms C Cobham, Dr F Caiani, Ms D Al Afranji, Mr M Whitehouse			

AR4421 Exile and Identity				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	4.00 pm Tue, 2.00 pm Thu			
This module will study linguistic, literary and cultural aspects of recent Arabic fiction, with readings from short stories mainly written by men and women writers from the Gulf and North Africa. The emphasis will be on the treatment of exile and identity within fiction mainly from the cultural margins of the Arab world, with secondary readings in English and class discussion.				
<b>Programme module type:</b>	Optional for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad			
<b>Co-requisite(s):</b>	AR4401	<b>Anti-requisite(s):</b>	AR4232	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour .			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Ms C Cobham			
<b>Lecturer(s)/Tutor(s):</b>	Ms C Cobham			

AR4422 Novellas				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	4.00 pm Tue, 2.00 pm Thu			
This module will study linguistic, literary and cultural aspects of modern Arabic fiction, with readings in Arabic from novellas written in the second half of the twentieth century, supplemented by readings in English from novellas and short stories by the same and other relevant authors. Students will be required to translate passages of text and comment on difficulties in literary translation and to analyse literary and cultural dimensions of the texts.				
<b>Programme module type:</b>	Optional for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad, AR4401			
<b>Co-requisite(s):</b>	AR4402	<b>Anti-requisite(s):</b>	AR4235	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Ms C Cobham			
<b>Lecturer(s)/Tutor(s):</b>	Ms C Cobham			

## Modern Languages - Honours Level - 2014/15 - August 2014

AR4461 Classical Arabic Poetry			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	11.00 am Mon, 11.00 am Thu		
The module aims to enable students to understand the development of genres and motifs in classical Arabic poetry and some of the principles of classical Arabic literary criticism. During the semester students will study selected texts and will develop an understanding of how the structures of Arabic grammar and the semantics of Arabic vocabulary work in a variety of poetic genres.			
<b>Programme module type:</b>	Optional for Arabic		
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad		
<b>Co-requisite(s):</b>	AR4401	<b>Anti-requisite(s):</b>	AR4251
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours (lectures, seminars and tutorials) and 1 surgery hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr O Elmaz		
<b>Lecturer(s)/Tutor(s):</b>	Dr O Elmaz		

AR4462 Classical Arabic Prose			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	11.00 am Mon, 11.00 am Thu		
The module aims to enable students to understand the development of genres and motifs in classical Arabic prose, as well as some principles of classical Arabic literary criticism. During the semester students will study a variety of classical Arabic prose texts and will develop an understanding of how the structures of Arabic grammar and the semantics of Arabic vocabulary work in a variety of literary genres.			
<b>Programme module type:</b>	Optional for Arabic		
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad, AR4401		
<b>Co-requisite(s):</b>	AR4402	<b>Anti-requisite(s):</b>	AR4251
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours (lectures, seminars and tutorials) and 1 surgery hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr O Elmaz		
<b>Lecturer(s)/Tutor(s):</b>	Dr O Elmaz		



AR4999 Dissertation in Arabic Studies				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
A dissertation of about 10,000 words on an approved topic in Arabic and Middle East Studies, supervised by an appropriate member of staff.				
<b>Programme module type:</b>	Optional for Arabic			
<b>Pre-requisite(s):</b>	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad			
<b>Co-requisite(s):</b>	AR4401, AR4402	<b>Anti-requisite(s):</b>	A dissertation in another subject.	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour seminars and approximately 10 contact hours with supervisor in total.			
	<b>Scheduled learning:</b> 13 hours		<b>Guided independent study:</b> 287 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Ms C Cobham			
<b>Lecturer(s)/Tutor(s):</b>	As appropriate			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Ms C Cobham or Dr F Caiani			

## Comparative Literature (CO) modules

CO3001 Issues in Comparative Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module will allow students to reach their own definitions of the discipline of Comparative Literature for the first time in their degree. Key areas in Comparative Literature may include: A) Influence and Reception; B) Literature that Compares; C) World Literature. The course will give students the opportunity to improve their essay writing through a reflective learning log and coursework essay.				
<b>Programme module type:</b>	Compulsory for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Finer			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

## Modern Languages - Honours Level - 2014/15 - August 2014

CO3002 Found in Translation				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This is a comparative, interdisciplinary module, which explores the importance of translation in the field of comparative literature as well as the concept of cultural translation. Students will have as compulsory reading a range of chapters from theoretical works on translation and comparative literature. The module will offer a number of texts in translation (different genres, periods and national literatures), along with a theoretical introduction. The three main areas of study are (i) translation issues (as they relate to different genres, periods, cultures and disciplines), (ii) literary translation and (iii) cultural translation.</p>				
<b>Programme module type:</b>	Compulsory for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002, CO3001			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> Take Home Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Bond			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

CO3020 Cultural Memory and Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces students to theories and examples of the creation of cultural memory in literature. Concepts such as communicative and collective memory will be discussed using three case studies, each exploring a particular ethnic, national or political cultural memory traced through literary and filmic texts as well as archival material and lieux de mémoire. Students will develop skills acquired during the first two years of Comparative Literature by applying a critical, analytical approach to these sources, encouraging them to recognize and interpret shifts, fault lines and conflicts within cultural memory from a trans-national perspective.</p>				
<b>Programme module type:</b>	Optional for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Lawson			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

CO4002 The Literary Canon				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Combining a theoretical framework with a number of case studies, this module will introduce students to the history and changing conceptions of the literary canon and its construction, exploring questions such as 'what do we mean by a "classic" and who decides?'; 'why do some texts survive whilst others do not?'; 'what different factors - e.g. educational and other institutions, the material conditions of production, reception and distribution, the politics of reading and writing, contemporary technologies - affect the formation of the canon in different periods and different countries?'				
<b>Programme module type:</b>	Compulsory for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002; CO3001, CO3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof M Hutton			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

CO4003 Issues in Cultural Studies				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module will expose students to alternative approaches to the study of culture and cultural production, allowing them to reach their own definitions of the discipline of Comparative Literature in the context of comparative cultural studies. Five key areas in Cultural Studies will be addressed: (1) Defining Culture, (2) Hegemony, Articulation and Discourse in Cultural Studies, (3) Intellectuals, Truth and Power, (4) Gender and Culture, (5) Representation, Resistance and Violence in Cultural Production. The module will also give students the opportunity to improve their essay writing through a reflective learning log and coursework essay.				
<b>Programme module type:</b>	Compulsory for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002; CO3001, CO3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5-hour seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

## Modern Languages - Honours Level - 2014/15 - August 2014

CO4020 Literature and the Bible				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will build on the knowledge of translation issues gained in CO3002 and apply it to arguable the most significant source for the European and American literary traditions - the Bible. Conceiving the relationship between individual authors and the biblical sources on which they draw as dynamic and symbiotic, it will analyse the role assumed by the Bible in the work of authors from different linguistic traditions. Its central concern is to give students the conceptual tools necessary to interpret the influence of this religious text, or collection of texts, in works that depart from canonical articulation or sanction, and to chart the historical development of its literary representation to the present day.</p>				
<b>Programme module type:</b>	Optional for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> lecture, seminar and tutorial work and a surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Wilson			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

CO4022 Illness and Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will explore the wide range of functions and representations of illness and disease in a variety of European (French, English, German, Italian and Russian) literary and theoretical texts from the 14th to the 20th century, and how its metaphorical employment can reflect changing beliefs related to individual identity, socio-cultural codes, narrative construction and the possibilities and limitations of language itself.</p> <p>Starting with a brief theoretical overview of modern canonical writings on illness by Virginia Woolf, Susan Sontag and Elaine Scarry which will provide an introduction to common tropes of mythologizing and metaphorizing illness, as well as the linguistic challenges to its representation, we will move on to focused thematic explorations of disease, employing close comparative readings of texts to reflect upon and discuss three broad topics: early plague narratives; the aesthetics of Romantic illness and the idea of illness as enlightenment; and the modern and postmodern employment of disease to subvert canonical representations of time and language in literature.</p>				
<b>Programme module type:</b>	Optional for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Bond			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

CO4024 Performing Early-Modern Sexualities				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>Early-modern perceptions of gender and sexuality were based less on a series of binary opposites (man/woman, male/female, masculine/feminine) than on a fluid continuum. The literature of the period demonstrates a particular interest in the performative nature of sexuality and gender, featuring male and female cross-dressers, bisexual clergymen, individuals of indeterminate sex and so on. Primary texts encompassing a variety of cultures and genres by male and female authors will be studied; these might include Veronica Franco's <i>Terze rime</i>, Catalina Erauso's <i>The Lieutenant Nun</i>, <i>The Transvestite Memoirs of the Abbé de Choisy</i>, and John Lyly's <i>Gallathea</i>. Some theory will also be studied, including short excerpts from Butler, Foucault and Laqueur.</p>				
<b>Programme module type:</b>	Optional for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Herdman			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

CO4026 Classicism in European Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module is about 'the best' writing. We will consider the notion of classicism in Italian, French and German literature, tracing the endeavours of generations of writers to rise to the challenge of antiquity by creating literary art which is well-proportioned, harmonious, and which advocates humanist ideals. Through this course, you will not only be introduced to some of the greatest writers Europe has produced (Goethe, Racine, Petrarca), you will develop as a comparatist by learning to reflect critically on national narratives of literary history. In particular, we will ask not only what classicism is, but also why writers and literary historians have felt it necessary to create their own, national classical centres and to what extent these are culturally specific.</p>				
<b>Programme module type:</b>	Optional for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5-hour seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M White			
<b>Lecturer(s)/Tutor(s):</b>	Dr M White, Dr M Ganofsky, Dr C Rossignoli			

## Modern Languages - Honours Level - 2014/15 - August 2014

CO4098 Short Dissertation in Comparative Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Planned timetable:</b>	To be arranged.			
<p>The dissertation offers students the possibility of personal advanced study on a topic on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The dissertation can be either a) a study of a given body of primary material in a given perspective, or b) a critical review of a range of secondary material on a given subject. It should be 5,000 - 6,000 words in length, be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be formally agreed in advance with the potential supervisor. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for Comparative Literature			
<b>Pre-requisite(s):</b>	CO1001 or CO1002; CO2001 and CO2002; CO3001			
<b>Anti-requisite(s):</b>	a 30-credit dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 seminars and 4 hours one-to-one meeting with supervisor			
	<b>Scheduled learning:</b> 7 hours		<b>Guided independent study:</b> 143 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr E Finer			

## French (FR) modules

FR3001 French Language 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am, 12.00 noon, 2.00 pm or 3.00 pm Mon			
<p>The module aims to give a fundamental training at Honours level in written and aural comprehension skills, objective resume writing, oral and written fluency, and in translation from French to English. It is intended as the basic practical language unit for all categories of student.</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032	<b>Required for:</b>	FR4105	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr J Prest			

FR3002 French Language 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am, 12.00 noon, 2.00 pm or 3.00 pm Mon			
Building on FR3001, the module aims to complete foundational training at Honours level, taking in written and aural comprehension skills, analytical résumé writing, oral and written fluency, and translation from English to French. It is intended as the basic practical language unit for all categories of student and may be a specific prerequisite for FR4105. This module may be replaced by Junior Honours second semester abroad at a partner institution. It may also be replaced by a 30-credit module in one of the non-ML triple degree subjects. It may not be omitted for any other reason.				
<b>Programme module type:</b>	Compulsory for French, French with Linguistics, Biology with French, Chemistry with French, Chemistry with French and External Placement. Compulsory except for those abroad on an agreed exchange programme in second semester of Junior Honours.			
<b>Pre-requisite(s):</b>	FR3001			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Herdman			

FR3028 Plays, Players and Playwrights: the Theatre in France, 1620-1715: (1)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module will cover the following areas with regard to the theatre from 1620 until 1660 in terms of texts, and until 1680 in terms of the physical aspects: (i) the theatre as a physical entity: the <i>salles</i> , developments in staging, spectacle; (ii) the theatre as theory: from baroque to classical; (iii) the theatre as text: developments in the three genres; (iv) the theatre and society; (v) the theatre and political control. Primary texts to be drawn from Rotrou, P. Corneille, Scarron, (Molière). Secondary texts from Quinault, Mairat, Tristan.				
<b>Programme module type:</b>	Related module: FR4129			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J S O Carson			

## Modern Languages - Honours Level - 2014/15 - August 2014

FR3063 De Gaulle and Since: Topics in the Politics, Culture and Society of the Fifth Republic (1)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Taught entirely in French, this module explores through literary texts, but also films, press extracts and video documents, the politics, culture and society of the Fifth Republic instituted by Charles de Gaulle. Major themes include: wartime France (collaboration and resistance); the Algerian War; de Gaulle's political thought; the Constitution of the Fifth Republic.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032	<b>Co-requisite(s):</b>	Related module: FR4164	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr G Bowd			

FR3077 Twenty-First-Century French Fiction				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The aim of this module is to introduce students to representative works of contemporary French fiction, where 'contemporary' indicates a period of time no greater than fifteen years from the present day. At least two texts will be published in the 21st century. Set texts will be selected with a view to revealing emerging thematic and stylistic trends in French literature, which might currently include: literature post 9/11; representations of 'the Far East' (China and Japan); new perspectives on WWII; faith(s) today; influence of the visual (e.g. film) on the written text.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof M-A Hutton			



FR3078 Writing the Self in Twentieth- and Twenty-first Century French literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module explores critical theories relating to <i>écriture de soi</i> as well as a variety of recent autobiographical and autofictional practices, reflecting significant trends in twentieth- and twenty-first century French literature. Texts included in the corpus will prompt discussions on childhood, memory, (life)-writing, language, education and identity. Students will be encouraged to adopt a comparative approach in order to reveal the interdisciplinary nature of life-writing, the use of photography, fiction and imagination in autobiography and autofiction, and to conceptualise potential links between genre and gender.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 29 hours		<b>Guided independent study:</b> 121 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E S M Hugueny-Léger			

FR3079 From Text to Screen: Novels and their Film Adaptations				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will focus on filmic adaptations of major French and Francophone literary works. Emphasis will be placed on the specificities and differences between film and literary text as well as their similarities. Whilst addressing questions about narrative and representation, this module will engage with the political dimensions of the process of appropriation at play in adaptation, in particular in the light of the development of postcolonial and feminist studies. It will lead to a discussion and analysis of the question of French and Francophone identity and its evolution both in literary and visual culture.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Laügt			

## Modern Languages - Honours Level - 2014/15 - August 2014

FR3101 French Integrated Year Abroad				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	May be subject to restrictions from receiving country.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The objective of the module is language learning and cultural familiarisation through a work placement in a French-speaking country. Placements will be as Language Assistants in Schools or on other assignments approved by the department.</p> <p>Formal learning and assessment will be through:</p> <p>(i) a supervised project of 4,000 words in the target language chosen in consultation with the module coordinator. To be submitted in May.</p> <p>(ii) a series of short written pieces in the target language in the form of guided responses to questions given and relating to the year abroad experience, totalling approximately 1000 words. To be submitted at various specified points during the year, across both semesters.</p> <p>(iii) a 10-minute oral exam in the target language to be sat upon the student's return to St Andrews after the WIYA year in which the written project will be presented and discussed.</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving French with Integrated Year Abroad			
<b>Pre-requisite(s):</b>	Admission to Honours Programme with Integrated Year Abroad			
<b>Anti-requisite(s):</b>	FR3103 or Erasmus Exchange			
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
	<b>Weekly contact:</b> By correspondence throughout the year.			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Herdman			

FR4078 Music in Nineteenth-Century French Poetry				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>In this module we will study the crucial role played by notions of music and musicality in the development of French poetry during an intense period of innovation. We will consider why, and how, throughout the nineteenth century, from the Romantic period (Lamartine, Hugo) to the Symbolists (Verlaine, Mallarme), as the definition of poetry evolves rapidly, it nevertheless remains closely bound to musical concepts such as melody, harmony and rhythm. Focusing primarily on important poetic texts by major authors, we will also consider the parallels between formal and theoretical developments in both poetry and music, and the ways in which both arts evolve through comparison with each other. No prior expertise in the practice or study is required for this module, which focuses on how poetry defines itself through musical ideas.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr D E Evans			

FR4103 Translation Methodology 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module gives a progressive, intensive training in the method and practice of translating from French into English. Topics covered include: translation as process and product; cultural issues in translation; translation and the formal properties of texts. A wide range of material is used, from technical texts, through consumer-oriented texts to poetry and song.				
<b>Programme module type:</b>	Optional for all MA degrees involving French Related module: FR4104			
<b>Pre-requisite(s):</b>	At least 45 credits from 3000- or 4000-level FR modules			
<b>Required for:</b>	FR4104			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr G Bowd			

FR4104 Translation Methodology 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The module gives a progressive, intensive training in the method and practice of translating from French into English. Topics covered include: translation and language variety, translation and textual genres, technical translation, editing, aspects of contrastive linguistics. A wide range of material is used, from technical texts, through consumer-oriented texts to literary texts.				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR4103			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr D E Evans			

## Modern Languages - Honours Level - 2014/15 - August 2014

FR4105 Communication Skills in French 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module aims to develop communicative skills, both written and spoken. It follows a text- and video-based method designed by the department which enables students to present ideas and opinions clearly and persuasively, in appropriate registers of French.				
<b>Programme module type:</b>	Compulsory for all degrees involving French			
<b>Pre-requisite(s):</b>	FR3002 if taken, otherwise FR3001 or Erasmus year/semester abroad.			
<b>Required for:</b>	FR4106			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Lügt			

FR4106 Communication Skills in French 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
Building on FR4105, this module aims to further develop communicative skills, both written and spoken. Pursuing the text- and video-based method it enhances the ability of students to present ideas and opinions clearly and persuasively, in appropriate registers of French.				
<b>Programme module type:</b>	Compulsory for all degrees involving French			
<b>Pre-requisite(s):</b>	FR4105			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Practical Examination = 30%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E S M Hugueny-Léger			

FR4110 Translating French Opera				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Students will translate Guillard's libretto for Gluck's opera Iphigénie en Tauride (1778) from French to (modern) English. The results will form the basis for the English text to be used in a staged production of the work by St Andrews Opera in June 2015. Key methodological decisions will be taken by the group at the beginning of the semester, and students will be encouraged to draw on weekly group discussions when making decisions about their own version of the translation. The results will be collective at their core but varied at the level of detail. Musical expertise is welcome but not essential.</p>				
<b>Programme module type:</b>	Optional for all degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 29 hours		<b>Guided independent study:</b> 121 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Prest			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Prest			

FR4123 Libertine Literature and Libertinage in Eighteenth-Century France				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module aims to familiarise students with libertinage, an essential literary, social and intellectual feature of the French eighteenth century.</p> <p>Students will study the erotic and pornographic productions of the Ancien Régime whilst examining the true meaning of 'erotic' and 'pornographic'. Students will therefore be invited to connect early modern preoccupations for instance about censorship and sexual freedom with current debates on such issues, and to think critically about them.</p> <p>The module's interdisciplinary approach to libertinage complements the literary focus of each seminars with references to philosophy, socio-cultural and intellectual history, visual arts, music and film adaptations.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Ganofsky			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Ganofsky			

## Modern Languages - Honours Level - 2014/15 - August 2014

FR4125 The French Age of Enlightenment				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>From a focus on religion to a study of travels through an enquiry of happiness, the thematic approach adopted in this module aims to reveal the exciting and formidably ambitious nature of the Enlightenment. The weekly seminars will offer students the opportunity to develop their expertise in the Enlightenment through close analysis of canonical texts by philosophers such as Montesquieu, Voltaire, Diderot or Rousseau. Finally, to underline the fact that the Enlightenment embraced the wide cultural reality of the 18th century, literature and philosophy will be studied alongside history, and most lectures will also consider painting and music.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032	<b>Anti-requisite(s):</b>	FR4122	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture (x 9 weeks), 1 seminar (x 8 weeks), 1 surgery hour (x 11 weeks)			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Ganofsky			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Ganofsky			

FR4129 Plays, Players and Playwrights: the Theatre in France, 1620-1715: (2)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will cover the following areas with regard to the theatre from 1660 until 1715 in terms of texts, and from 1680 until 1715 in terms of the physical aspects: (i) the theatre as a physical entity: the salles, developments in staging, opera; (ii) the theatre as theory: solidification and stasis; (iii) the theatre as text: generic polarisation; (iv) the theatre and society - l'effet Versailles; (v) the theatre and political control. Primary texts to be drawn from P. Corneille (Trois Discours), Molière, Racine, Dancourt, Lesage. Secondary texts from La Fontaine, Cyrano.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR3028			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Carson			

FR4164 De Gaulle and Since: Topics in the Politics, Culture and Society of the Fifth Republic (2)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>Taught entirely in French, this module continues to explore through literary texts, but also films, press extracts and video documents, the politics, culture and society of the Fifth Republic instituted by Charles de Gaulle. Major themes include: May 1968; the New Wave cinema; Mitterrand and the inheritance of the Left; the National Front and the politics of the Right.</p>				
<b>Programme module type:</b>	Related module: FR3063 Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G P Bowd			

FR4180 Modern French Thought				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module will focus on French thought and its developments from the 1940s onwards. The main critical and intellectual currents will be studied, such as existentialism, structuralism, semiology, post-modernism in relation to modernism, and feminism. Texts by key authors of the second half of the twentieth century (for example Sartre, Barthes, Kristeva, Foucault, Lyotard) will be analysed to show how the notions of language, knowledge and power as well as gender issues have evolved, how they are connected and how they are currently interpreted on the French contemporary literary and intellectual scene.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E Laügt			

## Modern Languages - Honours Level - 2014/15 - August 2014

FR4181 Contemporary French Crime Fiction				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces students to contemporary (post-1985) French crime fiction. Via the analysis of texts by key contemporary crime writers (e.g. Pennac, Dantec, Aubert, Izzo) students will learn about: the historical background of the genre; how and where crime fiction is situated in the fields of 'popular culture' and literature in general; what different sub-genres of crime fiction exists. The module will focus on both the modalities of social / historical / political engagement of the set texts and the narrative and linguistic strategies deployed in the writing of crime fiction.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof M A Hutton			

FR4182 Goods and Ads: Consumerism in Modern France				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>How have writers and artists reacted to the rise of consumer society in modern France? To what extent does the desire to possess shape social and gender roles? These are some of the questions which this module intends to explore, drawing on a varied corpus encompassing literature, film, television, advertisement campaigns (including parodies), and ranging from Emile Zola's <i>Au Bonheur des dames</i> to Frédéric Beigbeder's <i>99 Francs</i>. We will look at reactions to the rise of the bourgeois society, the use of objects in surrealist art, representations and criticisms of la société de consommation, and sociological approaches to (anti-)consumerism, from the end of the nineteenth century to the turn of the new millennium.</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR2022 or FR2032			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5-hour seminars and 1 surgery hour, plus occasional film/video viewing.			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 123 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr E S M Hugueny-Léger			



<b>FR4198 Dissertation on a French Topic</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The dissertation offers students the possibility of personal advanced study on a topic on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The dissertation can be either a) a study of a given body of primary material in a given perspective, or b) a critical review of a range of secondary material on a given subject. It should be 5,000 - 6,000 words in length, be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be agreed in advance by the Head of Department following a favourable report from the Supervisor, whom students should contact in the first instance. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR3002			
<b>Anti-requisite(s):</b>	FR3103, FR4199 or a 30-credit dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 seminars (week 2, 3 and 4) and approximately 4 contact hours with the supervisor			
	<b>Scheduled learning:</b> 7 hours		<b>Guided independent study:</b> 143 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr E Laügt			

<b>FR4199 Long Dissertation on a French Topic</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The dissertation offers students the possibility of personal advanced study on a topic in French on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The dissertation will, as a rule, consist of a study of a given body of primary material in a given perspective. Its length should be 10,000 words maximum. It should be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be agreed in advance by the Head of Department following a favourable report from the Supervisor, whom students should contact in the first instance. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for all MA degrees involving French			
<b>Pre-requisite(s):</b>	FR3002			
<b>Anti-requisite(s):</b>	FR3103, FR4198, or a dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 seminars and approximately 8 contact hours with the supervisor			
	<b>Scheduled learning:</b> 11 hours		<b>Guided independent study:</b> 289 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr E Laügt			

## Modern Languages - Honours Level - 2014/15 - August 2014

FR5810 French Science Project Dissertation				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
<p>This module offers students the opportunity of personal study arising from a work placement or research project in connection with their science course. It will be assessed by a dissertation in French, normally 5,000 words in length including any quotations, on an agreed topic for which the student already possesses adequate foundation knowledge and for which suitable supervision can be provided. During the work placement or project year, students will collect data for their dissertation and will prepare a plan in French which will be submitted at the beginning of their final year. This will provide a benchmark for writing the dissertation, which will allow any relevant knowledge acquired during the final year to be incorporated. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for Chemistry with French and External Placement			
<b>Pre-requisite(s):</b>	Admission to stage 4 of MChem with French Programme			
<b>Co-requisite(s):</b>	CH4441 or CH4442			
<b>Anti-requisite(s):</b>	FR3101, FR3103, FR3809, FR4809			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> To be arranged			
	<b>Scheduled learning:</b> 12 hours		<b>Guided independent study:</b> 288 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr G P Bowd			

## German (GM) modules

GM3005 German Language 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Tue and Fri			
<p>This is a core language module for all students in the first semester of the first year of the Honours programme. It aims to develop written and spoken German language skills. Two weekly classes are taught by native-language tutors. The module is based on a textbook which includes a wide range of different activities and registers. Students' work includes reading comprehension, discussion of issues raised by texts and audio-visual, a variety of written responses, and revision of aspects of grammar.</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Frau I Hartung			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

GM3006 German Language 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am or 1.00 pm Tue and Fri			
This is a core language module for all students in the second semester of the first year of the Honours programme. It further develops written and spoken German language skills through work based on texts and videotapes in a range of registers and tasks including reading comprehension, discussion of issues raised by texts and videotapes, written responses, and review of aspects of grammar.				
<b>Programme module type:</b>	Compulsory for all degrees involving German			
<b>Pre-requisite(s):</b>	(Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010) and GM3005 unless the student spent Semester 1 on a university placement abroad in which case only the successful completion of the semester abroad is needed.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Frau I Hartung			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

GM3047 The Literature of Friedrich Nietzsche				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
There are few German writers whose name is as instantly recognizable, for good or ill, as Friedrich Nietzsche. Nietzsche's enduring appeal is due, in large measure, to his skill as a stylist and to the literariness of his work. In this module, students will analyse key works by Nietzsche from a literary point of view, treating stylistic features, recurrent themes and symbols, and structural patterns. Though a unique figure in many ways, neither Nietzsche nor his writing can be disentangled from their time; students will thus be led to consider correspondences and differences between Nietzsche and other nineteenth-century authors.				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M White			
<b>Lecturer(s)/Tutor(s):</b>	Dr M White			

## Modern Languages - Honours Level - 2014/15 - August 2014

GM3080 Grammatical Rules and Lexical Exceptions in Modern German				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Grammatical rules and lexical exceptions in modern German are considered against the background of Saussurean structuralism and in relation to language teaching. Saussure said that a language is a system, and languages do indeed have rules, in their grammar. But most rules of grammar have a long list of unexplained exceptions - why? The view taken in this module is that unexplained exceptions indicate that the grammarians have got the rule wrong. We look at two rules of modern German to see how a close examination of their unexplained exceptions can point to a new and better rule: the passive and non-passivisable transitive verbs; and tense formation and strong verbs.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Anti-requisite(s):</b>	LI3001, ML3201			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C Beedham			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Beedham			

GM3088 Travel Writing in German since 1990				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Although literary scholars declared the German-language travelogue to be a dead genre in 1989, travel writing enjoyed a remarkable resurgence in the two following decades. This revival appears to have been prompted by such factors as the radical reconfiguration of real (and imaginary) geographies in the wake of German Reunification. At the same time as this resurgence, there occurred a shift in cultural studies referred to as the "spatial turn". Theorists of culture were becoming interested in how constructing and negotiating space bears upon identity. In this module the insights of the spatial turn are applied to the reading of the newest German-language travel writing.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A Cusack			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Cusack			

GM3091 The Nazi Past in German Cultural Memory				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
For almost 70 years German-language culture has wrestled with the burden of responsibility for the Second World War and the Holocaust and constantly questioned the capacity of literature, film and memorials to represent both the past and the conscience of the nation. This module will explore cultural memory of the Nazi past in Germany from 1945 to the present day, situating it in its philosophical and socio-political context. Students will analyse a wide variety of texts, debates and memorials, from novels to Youtube memes, asking what <i>Vergangenheitsbewältigung</i> (the struggle to come to terms with the past) was, is and will be in the future.				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5-hour seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr C Lawson			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Lawson			

GM3101 German Integrated Year Abroad				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	May be subject to restrictions from receiving country.			
<b>Planned timetable:</b>	Please Contact Department			
The objective of the module is language learning and cultural familiarisation through work placement in a German-speaking country. Placements will be as language assistant in a school or on other assignments approved by the department. Formal learning and assessment will be through: (i) a supervised project of 4,000 words in the target language chosen in consultation with the module coordinator. To be submitted in May. (ii) a series of short written pieces in the target language in the form of guided responses to questions given and relating to the year abroad experience, totalling approximately 1000 words. To be submitted at various specified points during the year, across both semesters. (iii) a 10-minute oral exam in the target language to be sat upon the student's return to St Andrews after the WIYA year in which the written project will be presented and discussed.				
<b>Programme module type:</b>	Compulsory for all degrees involving German with Integrated Year Abroad			
<b>Pre-requisite(s):</b>	Admission to the Honours Programme with Integrated Year Abroad and a pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Anti-requisite(s):</b>	GM3103 or Erasmus exchange.			
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
	<b>Weekly contact:</b> Please Contact Department			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Cusack			

## Modern Languages - Honours Level - 2014/15 - August 2014

GM4007 Translation Methodology (German / English)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The aim of the module is to develop advanced skills in translating from German into English. The module encourages students to make a careful analysis of the linguistic characteristics of the source texts and to focus on recurrent problems of translation and the methods available for dealing with them. A range of text types including consumer-oriented (technical/commercial), journalistic and literary will be translated into the target language.				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M White			
<b>Lecturer(s)/Tutor(s):</b>	Dr M White			

GM4046 Mediaeval Things				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
One of humanity's fundamental assumptions is that we self-determined humans are superior to inanimate objects. Mediaeval literature, however, is full of things that have powers over humans and act like them: they can speak, feel, move, have names and biographies: swords, relics, books, stones, coats and others. This module investigates the supernatural and natural powers of things in a range of texts, such as romances. We will also gain an overview of the recent 'thing theories' trying to understand the continued agency of objects from a variety of postmodern perspectives, and compare them to the mediaeval conceptions.				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr B Bildhauer			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Bildhauer			

<b>GM4049 Language and Ideology in the GDR and West Germany from 1949 - 1989</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module examines the relationship between language and politics by comparing the language of the FRG and the GDR in the period 1949-1989. The question posed is: did the two German states use language as an ideological weapon, or were their language differences merely a reflection of their different political systems, one capitalist, the other socialist? We will analyse texts of the period, e.g. from Neues Deutschland and the West German press, and use the Leipzig Duden and the Mannheim Duden, to bring out and examine the grammatical, lexical, word-formation and textual features which were characteristic of the language of the two Germanies during the Cold War.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C Beedham			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Beedham			

<b>GM4095 Rethinking German Realism 1845 - 1898</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>What happened in German literature between the death of Goethe and the appearance of Thomas Mann? What were the Germans doing when Flaubert and Tolstoy were writing? Often labelled inward-looking and provincial, German Realists were critical artists producing works of real beauty which reflect on the role of literature in the modern age. This module explores the aims and practices of German-speaking authors from 1845 - 1898. Students will examine theoretical writings alongside a range of representative literary texts (poetry, novels and novellas) from German and Austrian authors such as Stifter, Storm and Fontane. Students will develop their own definitions of Realism and reflect on the value of this movement for modern readers.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M White			
<b>Lecturer(s)/Tutor(s):</b>	Dr M White			

## Modern Languages - Honours Level - 2014/15 - August 2014

GM4098 Dissertation on German Topic				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The dissertation offers students the possibility of personal advanced study on a topic on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The dissertation can be either a) a study of a given body of primary material in a given perspective, or b) a critical review of a range of secondary material on a given subject. It should be 5,000 - 6,000 words in length, be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be formally agreed in advance with the Chair of Department. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Permission from Head of Department and a pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Anti-requisite(s):</b>	GM4099 or a 30-credit dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour seminars and 4 hours individual meetings in total.			
	<b>Scheduled learning:</b> 7 hours		<b>Guided independent study:</b> 143 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr C Beedham			

GM4099 Long Dissertation on a German Topic				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The dissertation offers students the possibility of personal advanced study on a topic in German on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The dissertation will, as a rule, consist of a study of a body of primary material in a given perspective. Its length should be 10,000 words maximum, and it should be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be agreed in advance by the Chairman of Department following a recommendation by the Supervisor, whom students should contact in the first instance. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours German			
<b>Pre-requisite(s):</b>	Permission from Head of Department and a pass at 11 or better in GM2002, GM2004, GM2008 or GM2010.			
<b>Anti-requisite(s):</b>	GM4098 or a dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 1-hour seminars and 8 hours individual supervision in total.			
	<b>Scheduled learning:</b> 11 hours		<b>Guided independent study:</b> 289 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr C Beedham			



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<b>GM4105 German Language 3</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am or 3.00 pm Mon and 11.00 am or 3.00 pm Thu			
This is a core language module for all students in the second year of the Honours Programme. It is designed to develop advanced written and oral language skills based on translation from and into German, while the oral part of the module will afford insight into communicative situations, strategies and approaches in a variety of contexts. Students will learn to recognise and analyse communication techniques and employ them effectively in different situations.				
<b>Programme module type:</b>	Compulsory for all degrees involving German			
<b>Pre-requisite(s):</b>	GM3005 and GM3006 unless the student spent either or both semesters of Junior Honours on a university placement abroad in which case only successful completion of Junior Honours is needed.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 50%, Coursework = 20%			
	<b>As used by St Andrews:</b> 1-hour Written Examination = 30%, Oral Examination = 30%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M White			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

<b>GM4106 German Language 4</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am or 3.00 pm Mon; 11.00 am or 3.00 pm Thu			
This is a core language module for students in the second year of the Honours Programme. It is designed to develop advanced written and oral language skills based on task-based text production, summary and essay writing, while the oral part of the module will afford insight into communicative situations, strategies and approaches in a variety of contexts. Students will further develop their competence in recognising and analyzing communication techniques and in employing them effectively in different situations.				
<b>Programme module type:</b>	Compulsory for Single Honours German. Normally compulsory for all other degrees involving German			
<b>Pre-requisite(s):</b>	GM4105 unless the student spent Semester One on a university placement abroad in which case only the successful completion of the semester abroad is needed.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%			
	<b>As used by St Andrews:</b> 1-hour Essay in German Examination = 30%, Oral Examination = 30%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M White			
<b>Lecturer(s)/Tutor(s):</b>	Team taught			

Modern Languages - Honours Level - 2014/15 - August 2014

Italian (IT) modules

IT3001 Italian Language 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This is the core language module for all students of Italian in the first year of the Honours programme. It builds on the work covered in the first and second level Italian Language modules. The module will include translation from and into Italian; analysis of advanced texts; practice in reading and discussing texts; and advanced Italian conversation.				
<b>Programme module type:</b>	Compulsory for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT2001 and a pass at 11 or better in IT2002			
<b>Required for:</b>	IT3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%			
	<b>As used by St Andrews:</b> Coursework = 100% (25% Oral test, 75% Continuous assessment),			
<b>Module Co-ordinator:</b>	Dr L Malici			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Malici			

IT3002 Italian Language 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module is intended to build on the achievements of IT3001, and to further increase the students' command of written and spoken Italian as well as reading and listening skills. The module will include translation from and into Italian; analysis and interpretation of advanced texts; practice in reading and discussing texts; advanced Italian conversation.				
<b>Programme module type:</b>	Compulsory for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT3001, IT2001 and a pass at 11 or better in IT2002			
<b>Required for:</b>	IT4003			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 30%, Practical Examination = 30%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr L Malici			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Malici			

IT3022 Nineteenth-Century Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module studies literature and thought of the nineteenth century, considered in its historical context. It focuses on works by Manzoni and Leopardi, and on topics such as the writer's relationship to society and the nature of literary representation.				
<b>Programme module type:</b>	Optional for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT2001 and a pass at 11 or better in IT2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Rossignoli			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Rossignoli			

IT3036 Venice				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
Venice is an enigmatic city steeped in its own history, literature and culture. Its enigmas and myths originate in its particular geographical and historical locations between land and water, present and past, trade and literature. The main threads that will be explored are those of the past within the modern city and the encounter between the 'other' and 'the self' at the very centre of the city's architectural labyrinth. This module will offer students a comprehensive introduction to Venice by focusing on some major works by Italian writers, playwrights and filmmakers: Giacomo Casanova, Carlo Goldoni, Luchino Visconti, Italo Calvino and Pier Maria Pasinetti.				
<b>Programme module type:</b>	Optional for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT2001 and a pass at 11 or better in IT2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1- or 2-hour seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Riccobono			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Riccobono			

## Modern Languages - Honours Level - 2014/15 - August 2014

IT3039 Emigrant Nation				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>The module looks at how the phenomenon of Italian mass emigration has been represented in Italian culture since 1960. Through the study of texts such as Melania Mazzucco's <i>Vita</i>, Carmine Abate's <i>Il muro dei muri</i>, and Laura Pariani's <i>Quando dio ballava il tango</i>, the module looks at how Italian identity is affected by cultural mobility across continents. The texts deal with emigration to a range of different locations – USA, Germany, Argentina, Australia – but the emphasis of the module is on how these texts construct Italy from a distance. The module looks at questions of home and belonging, cultural hybridity, emigrant language, and the various historical forces which prompted Italians to migrate.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT2001 and a pass at 11 or better in IT2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1- or 2-hour seminar and surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof D Duncan			
<b>Lecturer(s)/Tutor(s):</b>	Prof D Duncan			

IT3101 Italian Integrated Year Abroad				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Students cannot take this module who are on an Erasmus Exchange			
<b>Planned timetable:</b>	To be arranged.			
<p>The objective of the module is language learning and cultural familiarisation through work or study placement in Italy. Placements will be as language assistants in a secondary school, as students at an Italian university or on other assignments approved by the department.            Formal learning and assessment will be through            (i) a supervised project of 4,000 words in the target language chosen in consultation with the module coordinator. To be submitted in May.            (ii) a series of short written pieces in the target language in the form of guided responses to questions given and relating to the year abroad experience, totalling approximately 1000 words. To be submitted at various specified points during the year, across both semesters.            (iii) a 10-minute oral exam in the target language to be sat upon the student's return to St Andrews after the WIYA year in which the written project will be presented and discussed.</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving Italian with Integrated Year Abroad			
<b>Pre-requisite(s):</b>	Admission to the Honours Programme with Integrated Year Abroad			
<b>Anti-requisite(s):</b>	IT3103 or Erasmus exchange in Italy.			
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Italian Study Abroad Coordinator			
<b>Lecturer(s)/Tutor(s):</b>	Italian Study Abroad Coordinator			

## Modern Languages - Honours - Level - 2014/15 - August 2014

IT4003 Communication Skills 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This is the first part of the core language module for all students of Italian in the second year of the Honours programme. Its aim is to develop advanced communication skills, both oral and written, in Italian, and it comprises (1) weekly oral skills classes in which students follow a programme of contemporary topics, using written and audio-visual materials, and (2) weekly written expression workshops developing the productive skills of essay and report writing.</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT3001, IT3002 or equivalent Study Abroad module			
<b>Required for:</b>	IT4004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 oral class, 1 written class and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100% (30% Oral, 70% Continuous assessment)			
<b>Module Co-ordinator:</b>	Dr R M Riccobono			
<b>Lecturer(s)/Tutor(s):</b>	Dr R M Riccobono			

IT4004 Communication Skills 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This is the second part of the core language module for all students of Italian in the second year of the Honours programme. Its aim is to continue to develop advanced communication skills, both oral and written, in Italian, and comprises (1) weekly oral skills classes in which students follow a programme of contemporary topics, using written and audio-visual materials, and (2) weekly written expression workshops developing the productive skills of essay and report writing.</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT4003			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 oral class, 1 written class and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2.5-hour Written Examination = 30%, Practical Examination = 30%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C Rossignoli			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Rossignoli			

## Modern Languages - Honours Level - 2014/15 - August 2014

IT4010 Early Italian Lyric Poetry			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	To be arranged.		
Italian vernacular literature begins with lyric poetry, and early Italian poetry includes refined expressions of love, mystical spirituality, political critique, philosophical speculation, social satire and ribald humour. This module will examine lyric poetry in Italy from its origins to Dante, its roots, movements, forms, genres and tropes. We will study texts by poets such as Jacopone da Todi, Giacomo da Lentini, Guittone d'Arezzo, Bonagiunta da Lucca, Guido Guinizzelli, Guido Cavalcanti, Cino da Pistoia, Cecco Angiolieri, Rustico di Filippo, and Dante Alighieri.			
<b>Programme module type:</b>	Optional for all degrees involving Italian		
<b>Pre-requisite(s):</b>	IT2001 and a pass at 11 or better in IT2002		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1- or 2-hour seminar and 1 surgery hour.		
	<b>Scheduled learning:</b> 28 hours	<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr R Wilson		
<b>Lecturer(s)/Tutor(s):</b>	Dr R Wilson		

IT4028 The Twentieth-century Italian Novel			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
This module will look at a wide range of novels written over the course of the twentieth century in Italy in an attempt to chart representations of and reactions to the concept of modernity, as well as to examine the implementation and subversion of related modern narrative innovations in such works. Following a broad introduction to the literary context of the Italian twentieth century, we will proceed thematically, looking at questions of identity (crisis and dissolution in the novels of Luigi Pirandello and Italo Svevo), genre (the subversion of typical detective fiction and historical novel forms in Carlo Emilio Gadda and Elsa Morante), experimentation (the function of semiotics in Italo Calvino and Umberto Eco), gender (unconventional female and maternal stances in works by Oriana Fallaci and Goliarda Sapienza) and queer narratives (Umberto Saba, Pier Vittorio Tondelli).			
<b>Programme module type:</b>	Optional for all degrees involving Italian		
<b>Pre-requisite(s):</b>	IT2001 and a pass at 11 or better in IT2002		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1- or 2-hour seminar, and 1 surgery hour.		
	<b>Scheduled learning:</b> 28 hours	<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr E Bond		
<b>Lecturer(s)/Tutor(s):</b>	Dr E Bond		

IT4029 Black Italians				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The module looks at the relationship between Italian identity and whiteness. In the nineteenth century Italian race theorists argued for a close connection between Africa and the Italian South at a time when Italy's colonial adventure was about to start. The fascist publication <i>La difesa della razza</i> tried to protect the nation from contamination by other races but especially Jews. Recent migration to Italy from across the globe has provoked a range of challenges to the nature of Italian identity. Through the study of a range of literary and film texts from the 1860s to the present day, this module explores Italy's abiding concern with protecting its own whiteness from contamination.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Italian			
<b>Pre-requisite(s):</b>	IT2001 and a pass at 11 or better in IT2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1- or 2-hour seminar, film viewing and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof D Duncan			
<b>Lecturer(s)/Tutor(s):</b>	Prof D Duncan			

IT4098 Dissertation on an Italian Topic				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>The dissertation offers students the possibility of personal advanced study on an Italian topic on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The Dissertation can be either a) a study of a given body of primary material in a given perspective, or b) a critical review of a range of secondary material on a given subject. It should be 5,000 - 6,000 words in length, be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be formally agreed in advance with the potential supervisor and the Head of the Italian Department. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Either IT4098 or IT4099 is compulsory for Single Honours Italian			
<b>Pre-requisite(s):</b>	IT3001, IT3002 or equivalent Study Abroad module			
<b>Anti-requisite(s):</b>	IT4097, IT4099 or 30-credit dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 seminars and 4 hours with supervisor			
	<b>Scheduled learning:</b> 7 hours		<b>Guided independent study:</b> 143 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Head of Italian Department			

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IT4099 Long Dissertation on an Italian Topic			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.		
<b>Planned timetable:</b>	To be arranged.		
<p>The dissertation offers students the possibility of personal advanced study on a topic in Italian on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The Dissertation will, as a rule, consist of a study of a body of primary material in a given perspective. Its length should be 10,000 words maximum, and it should be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be formally agreed in advance with the potential supervisor and the Head of the Italian Department. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>			
<b>Programme module type:</b>	Either IT4098 or IT4099 is compulsory for Single Honours Italian		
<b>Pre-requisite(s):</b>	IT3001, IT3002 or equivalent Study Abroad module		
<b>Anti-requisite(s):</b>	IT4097, IT4098, or a dissertation in another subject		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 seminars, 8 contact hours with supervisor.		
	<b>Scheduled learning:</b> 11 hours	<b>Guided independent study:</b> 289 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Dissertation = 100%		
<b>Module Co-ordinator:</b>	Head of Italian Department		



Modern Language (ML) modules

ML3105 Modern Languages Integrated Year Abroad: Semester 1			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	n/a		
<p>The objective of the module is language learning and cultural familiarisation through a work placement or a period of approved study, in the context of an integrated Year Abroad arrangement involving two countries where the languages included in the student's Honours degree programme are spoken. The particular components of this type of integrated year abroad (ML3105 and ML3106) are subject to specific approval by the Head of School (or delegate) in the first semester of the preceding year. Any student considering this module must seek early advice on the acceptability of their proposed pattern of residence and work/study abroad. Assessment takes the form of</p> <p>(i) a supervised project of 2,500 words in the target language (2,000 words in Russian) chosen in consultation with the module coordinator. To be submitted in December (ML3105) or May (ML3106)</p> <p>(ii) two short written pieces in the target language in the form of guided responses to questions given and relating to the experience abroad, totalling approximately 500 words</p> <p>(iii) a 10-minute oral exam in the target language to be sat upon the student's return to St Andrews after the WIYA year, during which the project will be presented and discussed.</p>			
<b>Programme module type:</b>	Optional to any WIYA programme only when student is unable to spend a whole year in one linguistic area		
<b>Pre-requisite(s):</b>	Admission to Honours Programme with Integrated Year Abroad.		
<b>Co-requisite(s):</b>	ML3106	<b>Anti-requisite(s):</b>	Any year long Study Abroad programme
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.		
	<b>Weekly contact:</b> By correspondence.		
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Departmental WIYA Coordinator		

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ML3106 Modern Languages Integrated Year Abroad: Semester 2				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<p>The objective of the module is language learning and cultural familiarisation through a work placement or a period of approved study, in the context of an integrated Year Abroad arrangement involving two countries where the languages included in the student's Honours degree programme are spoken. The particular components of this type of integrated year abroad (ML3105 and ML3106) are subject to specific approval by the Head of School (or delegate) in the first semester of the preceding year. Any student considering this module must seek early advice on the acceptability of their proposed pattern of residence and work/study abroad. Assessment takes the form of</p> <p>(i) a supervised project of 2,500 words in the target language (2,000 words in Russian) chosen in consultation with the module coordinator. To be submitted in December (ML3105) or May (ML3106)</p> <p>(ii) two short written pieces in the target language in the form of guided responses to questions given and relating to the experience abroad, totalling approximately 500 words</p> <p>(iii) a 10-minute oral exam in the target language to be sat upon the student's return to St Andrews after the WIYA year, during which the project will be presented and discussed.</p>				
<b>Programme module type:</b>	Optional to any WIYA programme only when student is unable to spend a whole year in one linguistic area			
<b>Pre-requisite(s):</b>	Admission to Honours Programme with Integrated Year Abroad.			
<b>Co-requisite(s):</b>	ML3105	<b>Anti-requisite(s):</b>	Any year long Study Abroad programme	
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
	<b>Weekly contact:</b> By correspondence.			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Departmental WIYA Coordinator			

ML3201 Grammatical Rules and Lexical Exceptions				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	4.00 pm Tue, 12.00 noon Wed			
<p>Grammatical rules and lexical exceptions are considered against the background of Saussurean structuralism and in relation to language teaching. Saussure said that a language is a system, and languages do indeed have rules, in their grammar. But most rules of grammar have a long list of unexplained exceptions - why? The view taken in this module is that unexplained exceptions indicate that the grammarians have got the rule wrong. We look at two grammatical rules to see how a close examination of their unexplained exceptions can point to a new and better rule: the passive and non-passivisable transitive verbs; and tense formation and strong verbs. The main language of illustration is English, but students of Arabic, French, Italian, Persian, Russian and Spanish are encouraged to bring these languages into the discussion.</p>				
<b>Programme module type:</b>	Optional for any Modern Languages programmes, Except when the only language taken is German (when students should take GM3080)			
<b>Pre-requisite(s):</b>	Entry into Honours in at least one of the following languages: Arabic, French, Italian, Persian, Russian, Spanish			
<b>Anti-requisite(s):</b>	LI3001, GM3080			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1.5 hours and 1 module surgery hour.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C Beedham			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Beedham			

Persian (PR) modules

PR3001 Higher Intermediate Persian 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	4.00 pm Mon and Thu			
<p>This is a core language module for all students of Persian in the first year of the Honours programme. It builds on the work covered in the first and second level Persian Language modules. The module will include translation from and into Persian; analysis of more advanced texts; practice in reading and discussing texts; and more advanced Persian conversation. By the end of the module the students are expected to be competent in conversation at a higher intermediate to advanced level on a variety of topics (modern events and Iranian culture), in discussing a range of specific topics; for example, history, contemporary politics and literature, and in reading and translating modern standard Persian texts from newspapers, short stories, etc.</p>				
<b>Programme module type:</b>	Compulsory for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002	<b>Required for:</b>	PR3002	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

PR3002 Higher Intermediate Persian 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	4.00 pm Mon and Thu			
<p>This is a core language module for all students of Persian in the first year of the Honours programme. It builds on the work covered in PR3001. The module will include translation from and into Persian; analysis of more advanced texts; practice in reading and discussing texts; and more advanced Persian conversation. By the end of the module the students are expected to be competent in conversation at a higher intermediate to advanced level on a variety of topics (modern events and Iranian culture), in discussing a range of specific topics; for example, history, contemporary politics and literature, and in reading and translating modern standard Persian texts from newspapers, short stories, etc.</p>				
<b>Programme module type:</b>	Compulsory for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002, PR3001			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

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PR3020 Key Texts in Modern Persian Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>Students will learn about key 20th century authors through reading biographies and critical writing in Persian and English. They will also read, translate and discuss at least one sample of writing by each of these authors. Where short stories are selected, the whole text will be discussed, but in the case of novels a short passage will be selected for the students to work on. The module is designed to improve and broaden students' knowledge of Persian while also including a more analytical and cultural component. Students will be required to translate passages of text and comment on difficulties of translation, and to translate into and compose in modern Persian on related subject matters. This module will also address the contribution of these literary works to events and trends in contemporary Iranian society.</p>				
<b>Programme module type:</b>	Optional for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002	<b>Co-requisite(s):</b>	PR3001	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

PR3021 Modern Iran through Cinema				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module introduces students to the study of cinema as a mode of representation of social history by offering a social overview of cinema in Iran since the 1960s. Looking at films as a mirror reflecting the society, this module will offer a chronological history of Iranian cinema while also addressing changes in Iranian society. Students will be given a reading list to complement the lectures, the contents of which will provide a basis for seminar discussions. There will be one film screening per week accompanying the lectures and students will be encouraged to develop their own critical approach through seminars and discussions. No knowledge of Persian is required for this module, but students with a knowledge of Persian will be given access to Persian language material where appropriate.</p>				
<b>Programme module type:</b>	Optional for Persian			
<b>Pre-requisite(s):</b>	Honours entry into Persian, or otherwise with the permission of the Head of School			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Ghorbankarimi			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Ghorbankarimi			

PR4001 Advanced Persian 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module will build upon the skills gained in 3000-level modules. More emphasis will be placed on free composition in Persian and translation into Persian. Students will also give oral presentations in Persian, and a variety of materials representing different facets of Persian speaking culture will be used to broaden students' knowledge of the language.				
<b>Programme module type:</b>	Compulsory for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002, PR3001, PR3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Oral Examination 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

PR4002 Advanced Persian 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module will build upon the skills gained in PR4001. As in PR4001, emphasis will be placed on free composition in Persian and translation into Persian. Students will give oral presentations in Persian, and a variety of materials representing different facets of Persian speaking culture will be used to broaden students' knowledge of the language.				
<b>Programme module type:</b>	Compulsory for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002, PR3001, PR3002, PR4001			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Oral Examination 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

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PR4020 Introduction to Classical Persian Poetry				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Entry to Persian honours programme			
<b>Planned timetable:</b>	To be arranged.			
This module will offer students the initial tools needed to read classical Persian poetry. It will teach a basic knowledge and critical understanding of the major genres and themes of classical Persian poetry, in addition to introducing different literary schools instrumental in the development of the Persian literary heritage. Students will learn about the different figures of speech, structures and imagery common to classical Persian poetry through the study of selected texts. Throughout this module students will also learn about the key figures in Persian poetry and read and translate at least one sample work by each of the major Iranian poets.				
<b>Programme module type:</b>	Optional for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

PR4021 Female Identity in Contemporary Iran				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module offers a chronological overview of the evolution in the representation of female subjects in Iran, focusing on a different topic related to women's identity and the representation of women every week. All these topics will be accompanied by readings that complement the lectures and will form the basis of discussion in tutorials. The topics selected will include photographs of women in the Qajar courts at the turn of the twentieth century, the emergence of the first female poets and writers, female activism in Iran, the role of women in the Islamic Revolution and women filmmakers. This module aims to offer an overview of the position of women in Iranian society within an historical context, helping students form a deeper understanding of Iranian culture and history. No knowledge of Persian is required for this module, but students with a knowledge of Persian will be given access to Persian language material where appropriate.				
<b>Programme module type:</b>	Optional for Persian			
<b>Pre-requisite(s):</b>	Honours entry into Persian, or otherwise with the permission of the Head of School			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Ghorbankarimi			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Ghorbankarimi			

PR4098 Short Dissertation on a Persian Topic				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Planned timetable:</b>	To be arranged			
<p>This is to give students the option of writing their dissertation on a topic in Persian to help develop their research skills and provide the opportunity for them to build a solid academic foundation should the students want to continue their studies. The dissertation offers students the possibility of personal advanced study on a topic in Persian on which they already have adequate knowledge and for which a suitable supervisor can be found. Guidance will be offered on research methods, perspective and presentation. The dissertation will, as a rule, consist of a study of a given body of primary material analysed with reference to a number of secondary texts on the primary material with a given perspective. Its length should be 5,000 to 6,000 words maximum and is normally written in English.</p>				
<b>Programme module type:</b>	Optional for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002, PR3001, PR3002			
<b>Anti-requisite(s):</b>	PR4099 or any dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 seminars and 5 hours with supervisor.			
	<b>Scheduled learning:</b> 7 hours		<b>Guided independent study:</b> 143 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

PR4099 Long Dissertation on a Persian Topic				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
<p>This is to give students the option of writing their dissertation on a topic in Persian to help develop their research skills and provide the opportunity for them to build a solid academic foundation should the students want to continue their studies. The dissertation offers students the possibility of personal advanced study on a topic in Persian on which they already have adequate knowledge and for which a suitable supervisor can be found. Guidance will be offered on research methods, perspective and presentation. The dissertation will, as a rule, consist of a study of a given body of primary material analysed with reference to a number of secondary texts on the primary material with a given perspective. Its length should be 10,000 words maximum and is normally written in English.</p>				
<b>Programme module type:</b>	Optional for Persian			
<b>Pre-requisite(s):</b>	PR2001, PR2002, PR3001, PR3002			
<b>Anti-requisite(s):</b>	PR4098 or any dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 seminars and 8 meetings with supervisor			
	<b>Scheduled learning:</b> 9 hours		<b>Guided independent study:</b> 291 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr S Talajooy			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Talajooy			

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Russian (RU) modules

RU3001 Advanced Russian Language 1, Part 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module is mandatory for all Honours programmes containing a Russian element, except for programmes which include RU3101. It is designed to build on the level of language competence attained at the end of RU2002, RU2004 and RU2006. The module deals with grammar, the practical problems of translation from and into Russian, and introduces essay-writing in Russian. Oral tuition forms an important element of this module.				
<b>Programme module type:</b>	RU3001 or RU3005 is compulsory for all Russian degrees			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Anti-requisite(s):</b>	RU3005	<b>Required for:</b>	RU3002	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes, 1 oral class and 1 surgery hour.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 106 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr E Finer			

RU3002 Advanced Russian Language 1, Part 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module is mandatory for all programmes containing a Russian element, except for programmes which include RU3101 or RU3102. It is designed to build on the language proficiency acquired in RU3001. It deals with grammar, the practical problems of translation, and essay-writing in Russian. Oral tuition forms an important element of the module.				
<b>Programme module type:</b>	RU3002 or RU3110 is compulsory for all Russian degrees unless a semester abroad is taken			
<b>Pre-requisite(s):</b>	RU3001	<b>Anti-requisite(s):</b>	RU3110	
<b>Required for:</b>	RU4101			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes, 1 oral class and 1 surgery hour.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 106 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr O Voronina			



RU3005 Advanced Russian Translation 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module is designed to build on the language proficiency attained through a period of study in Russia, either on RU3101 or ML3106 (in Russia). The module is based around the study of the finer points of Russian grammar, advanced translation from and into Russian, essay-writing in Russian, and small-group oral classes.				
<b>Programme module type:</b>	RU3001 or RU3005 is compulsory for all Russian degrees, except Russian and a second language and a third subject			
<b>Pre-requisite(s):</b>	RU3101, RU3106 or ML3106 in Russia.			
<b>Anti-requisite(s):</b>	RU3001	<b>Required for:</b>	RU3110	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes, 1 oral class and 1 surgery hour.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 106 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical Examination = 15%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr O Voronina			

RU3021 Russian Poetry of the Golden Age				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module is designed to develop the knowledge of Russian literature acquired at sub-honours level, and in particular to examine Russian poetry of the early nineteenth century. It begins with the theory of versification, after which the most important poets of the early nineteenth century are studied, together with key texts in Russian. These include Pushkin's lyric poetry and novel in verse Eugene Onegin, and the poetry of Lermontov and Derzhavin.				
<b>Programme module type:</b>	Optional for all degrees involving Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Practical Oral Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr E Finer			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Finer			

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RU3026 Russian Modernist Fiction 1900 - 1940				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The module is designed to build on the knowledge of modern Russian literature acquired at sub-honours level, concentrating on the counter-tradition of 'modernist' or experimental fiction from Symbolism to 'Oberiu' (The association of Real Art).				
<b>Programme module type:</b>	Optional for all degrees involving Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> 15-minute Practical Oral Examination = 20%, Coursework = 80%			
<b>Module Co-ordinator:</b>	Dr E Finer			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Finer			

RU3030 A Special Russian Author of the Twentieth Century				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module is designed to build on the knowledge of twentieth-century Russian literature acquired at sub-honours level, with particular concentration on one major author and examining especially those works that are not covered in sub-honours modules. Authors offered may include Mandel'shtam, Maiakovskii, Belyi, Solzhenitsyn, etc. Independent study will form a major element of the module.				
<b>Programme module type:</b>	Optional for all degrees involving Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr O Voronina			
<b>Lecturer(s)/Tutor(s):</b>	Dr O Voronina			

RU3031 Russian 'Village Prose': 1953 - 1980 (SUBJECT TO APPROVAL)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module is designed to familiarise students with one of the most ideologically important bodies of literature published in the post-Stalin period, Soviet 'Village Prose'. Students will read works by a number of the most influential writers to have contributed to the genre, including Vasilii Belov, Aleksandr Solzhenitsyn, Vasilii Shukshin, and Valentin Rasputin, and engage with the para-literary criticism that emerged around the literary movement. In order to locate the texts within their social and cultural contexts the module will begin with two introductory sessions devoted to the question of urban and rural transformation and its literary treatment. Thereafter, the module will be taught through seminars that examine the themes of urban-rural opposition, village byt, nature, childhood and memory, a number of which will be student-led and introduced by student presentations. Many of the primary texts are available only in Russian and so discussion throughout the module will make reference to the Russian originals.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Anti-requisite(s):</b>	RU4131			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars and occasional film/video viewing, and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr V Donovan			

RU3043 Theatre and Performance in Twentieth-Century				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module examines theories and practices of theatre and performance through study of major Russian dramatists, composers and directors. In particular, the module considers the ways in which tensions between psychological realism and festive theatricality, Stanislavsky's and Meyerhold's rival directorial principles, come to bear on 20th century Russian and Soviet drama.</p> <p>The module draws on a variety of media and cultural texts including drama, (rock)opera and silent film. Texts are analysed in their cultural contexts and assessed as both a reflection of contemporary concerns and politics and an attempt to influence and shape them. Students will explore visual languages of the stage by considering usage of theatrical space, set and costume design as an integral part of performance. Negotiation, interpretation and translation of text onto stage will be addressed through study of iconic productions.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars and fortnightly lectures, and 1 surgery hour. 2 hours film viewing over semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr O Voronina			
<b>Lecturer(s)/Tutor(s):</b>	Dr O Voronina			

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RU3044 Russia's Literary Easts (SUBJECT TO APPROVAL)			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	To be arranged.		
<p>This module will explore the peculiarities of Russian "Orientalism" through a number of key literary works about the Caucasus and Central Asia. The aims of the course are threefold: to introduce students to this signature body of literature, to expose them to contemporary debates about Russian and Soviet imperial culture, and to examine the relationship between Russian modernist literature and its forebears. Students will consider the establishment of foundational literary myths about Russia's "Orient" in the "Golden Age," as well as the problem of how Russian literature served the empire, before moving on to a range of later works that reconsider the relationship between Russia and its "Eastern" borderlands. The syllabus will include works by such authors as Derzhavin, Pushkin, Lermontov, Tolstoy, Dostoevsky, Blok, Bely, Mandelstam, and Platonov.</p>			
<b>Programme module type:</b>	Optional for all degrees involving Russian		
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour lecture in first week followed by 2-hour seminars (x 10 weeks).		
	<b>Scheduled learning:</b> 21 hours	<b>Guided independent study:</b> 129hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%		
<b>Module Co-ordinator:</b>	Dr K Holt		
<b>Lecturer(s)/Tutor(s):</b>	Dr K Holt		

RU3101 Russian Integrated Year Abroad			
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	May be subject to restrictions from receiving country.		
<b>Planned timetable:</b>	Please Contact Department		
<p>The objective of the module is language learning and cultural familiarisation through a study placement in Russia. Placements will be as students in Russian at a Foreign Language department at universities or in language schools. Assessment takes the form of</p> <p>(i) a supervised project of 3,000 words in Russian chosen in consultation with the module coordinator, to be submitted in May;</p> <p>(ii) two short written pieces in the target language in the form of guided responses to questions given and relating to the experience abroad, totalling approximately 1000 words;</p> <p>(iii) a 10-minute oral exam in the target language to be sat upon the student's return to St Andrews after the WIYA year, during which the project will be presented and discussed.</p>			
<b>Programme module type:</b>	Compulsory for all degrees involving Russian with Integrated Year Abroad		
<b>Pre-requisite(s):</b>	Admission to the Honours Programme with Integrated Year Abroad, Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.		
<b>Anti-requisite(s):</b>	RU3102 or Erasmus exchange.	<b>Required for:</b>	RU3005
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.		
	<b>Weekly contact:</b> up to 20 hours depending on agreement with Russian institution.		
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr E Finer		

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<b>RU3102 Semester of Study in Russia</b>				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	Please Contact Department			
<p>This module is offered subject to the availability of a suitable venue and to the consent of the Head of School. It is an optional part of the degree programme for students who have not spent a year in Russia as part of a degree With Integrated Year Abroad. The module is intended to develop students' skills in all aspects of the modern Russian language through extended residence and study in the country, offering total immersion in the culture. The syllabus is designed in co-operation with a university or other institution in a Russian-speaking environment. The project essay will be 4,000 words in Russian to be received by the Department in July. The examination is sat in Week 1 of the first semester of the following academic year.(Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving Russian with an approved semester abroad			
<b>Pre-requisite(s):</b>	RU3001	<b>Anti-requisite(s):</b>	RU3101, RU3103	
<b>Required for:</b>	RU4101			
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
	<b>Weekly contact:</b> up to 20 hours depending on agreement with Russian institution.			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 25%, Practical Examinations = 0%, Coursework = 75%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 25%, Dissertation in Russian = 50%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr E Finer			

<b>RU3110 Advanced Russian Translation 2</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module builds on the written and spoken language skills developed in RU3005 by students who have spent a period of study in a Russian-speaking environment. Spoken Russian is improved through small group tuition with a native Russian language instructor. There are regular translation exercises grammar classes and oral presentations.</p>				
<b>Programme module type:</b>	RU3002 or RU3110 is compulsory for all Russian degrees unless a semester abroad is taken			
<b>Pre-requisite(s):</b>	RU3005	<b>Anti-requisite(s):</b>	RU3002	
<b>Required for:</b>	RU4101			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 language classes, 1 oral class and 1 surgery hour.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 106 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr C E Whitehead			

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RU4101 Advanced Russian Language 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module is mandatory for all Honours programmes containing a Russian element. It is designed to build on the level of language competence attained at the end of RU3002, RU3102 and RU3110. It deals with the practical problems of translating from and into Russian and with essay writing. Oral tuition also forms an important element of this module with the emphasis on single-person reports and group discussions.				
<b>Programme module type:</b>	Compulsory for all degrees involving Russian			
<b>Pre-requisite(s):</b>	RU3002 or RU3102 or RU3110	<b>Required for:</b>	RU4102, RU4104	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 language class, 1 oral class and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Mrs S Booth			
<b>Lecturer(s)/Tutor(s):</b>	Mrs S Booth			

RU4102 Advanced Russian Oral Skills				
<b>SCOTCAT Credits:</b>	0	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module is the Oral part of RU4104 Communication Skills and is designed for students pursuing a triple-language or triple-subject degree whose modular programme does not allow them to opt for RU4104. It concentrates on developing the ability to communicate confidently in a broad range of possible situations in different areas of social life. The materials used include texts on a broad variety of topics on contemporary issues in different styles, including contemporary Russian literature, newspapers and magazine articles etc, as well as audiotapes and videotapes.				
<b>Programme module type:</b>	Optional for all degrees involving Russian			
<b>Pre-requisite(s):</b>	RU4101	<b>Anti-requisite(s):</b>	RU4104	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour oral class.			
	<b>Scheduled learning:</b> 0 hours		<b>Guided independent study:</b> 0 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 100%, Coursework = 0%			
	<b>As used by St Andrews:</b> 20-minute Practical Oral Examination = 100%			
<b>Module Co-ordinator:</b>	Mrs S Booth			
<b>Lecturer(s)/Tutor(s):</b>	Mrs S Booth			

RU4104 Russian Communication Skills				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
This module aims to give students confidence in communicating in Russian in a range of contexts, both spoken and written. Classes follow a given theme each week, on which are based student debates, role-plays and written work. Particular attention is given to the expression of emotional and attitudinal standpoints with concrete applications to everyday social situations.				
<b>Programme module type:</b>	Compulsory for all degrees involving Russian, except Three-Subject degrees			
<b>Pre-requisite(s):</b>	RU4101	<b>Anti-requisite(s):</b>	RU4102	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour oral class, 1 surgery hour, 1-hour video class or written work.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 60%, Coursework = 40%			
	<b>As used by St Andrews:</b> 20-minute Oral Examination = 40%, Audio-visual Examination = 20%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Mrs S Booth			

RU4142 The Fantastic in Nineteenth-Century Russian Literature				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
The fantastic is a genre which interrogates the boundaries between the natural and the supernatural in order to provoke interpretative ambiguity. Developing out of the romantic tradition and alongside the rise of the realist novel, the fantastic enjoyed considerable popularity in Russia and was practised by many of its most notable writers. This module builds on the knowledge of nineteenth-century literature acquired at sub-honours level as students read examples of the fantastic by such writers as Pogorel'skii, Pushkin, Zagoskin, Gogol', Odoevskii, Lermontov, Turgenev, Dostoevskii, Garshin and Chekhov. Analysis of the chosen texts will make reference to theories of the fantastic proposed since c.1950 as well as to narrative theory.				
<b>Programme module type:</b>	Optional for all degrees involving Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C E Whitehead			
<b>Lecturer(s)/Tutor(s):</b>	Dr C E Whitehead			

## Modern Languages - Honours Level - 2014/15 - August 2014

RU4198 Dissertation on a Russian Topic				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The dissertation offers students the possibility of personal advanced study on a topic on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The dissertation can be either a) a study of a given body of primary material in a given perspective, or b) a critical review of a range of secondary material on a given subject. It should be 5,000 - 6,000 words in length, be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be formally agreed in advance with the potential supervisor. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for all degrees involving Russian, except Single Honours Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Anti-requisite(s):</b>	RU4199 or a 30-credit dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 4 supervision sessions over the semester plus 3 seminars			
	<b>Scheduled learning:</b> 7 hours		<b>Guided independent study:</b> 143 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr E Finer			

RU4199 Long Dissertation a Russian Topic				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The dissertation offers students the possibility of personal advanced study on a topic which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The Dissertation will, as a rule, consist of a study of a given body of primary material in a given perspective. Its length should be 10,000 words maximum, and it should be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be formally agreed in advance with both the research co-ordinator and the potential supervisor. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for Single Honours Russian			
<b>Pre-requisite(s):</b>	Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
<b>Anti-requisite(s):</b>	RU4198 or a dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 8 supervision sessions over the year plus 3 seminars.			
	<b>Scheduled learning:</b> 11 hours		<b>Guided independent study:</b> 289 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr E Finer			



Spanish (SP) modules

SP3001 Spanish Language 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Thu, plus 1 practical to be arranged.			
The overall objective of this core module is to promote advanced skills in listening, speaking, reading and writing in Spanish. In addition there will be elements that stimulate a high level of awareness of grammar. The syllabus is based on a selection of modern Spanish texts from both Spain and Spanish America which are used as sources for the study of various registers through reading and listening comprehension, precis and writing and rewriting exercises. The grammar involves a full understanding of an array of issues dealt with by Butt and Benjamin.				
<b>Programme module type:</b>	Compulsory for all degrees involving Spanish			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Required for:</b>	SP3002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 class, 1 practical and 1 surgery hour.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Letrán			

SP3002 Spanish Language 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am Thu, plus 1 practical to be arranged.			
The overall objective of this core module is to promote advanced skills in listening, speaking, reading and writing in Spanish. The syllabus combines two main types of material: listening comprehension on the basis of recordings and a selection of texts for the study of different linguistic registers (including dialogues from fictional works and essays, books and sports reviews and written portraits of famous characters from newspapers.)				
<b>Programme module type:</b>	Compulsory for all degrees involving Spanish			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004, SP3001			
<b>Required for:</b>	SP4003, SP4102, SP4103			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 class, 1 practical and 1 surgery hour.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof J Larios			

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SP3006 Literary Translation			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	9.00 am - 10.30 am Wed		
<p>This module is designed to guide and train the student of the Spanish language in the translation of demanding literary texts, both from and into Spanish. The emphasis will be on practical translation. The source texts will be chosen so as to represent a variety of periods, genres and registers. The module has a complementary relationship to language work in the core language modules. It will require systematic use of sources of information about Spanish (e.g. dictionaries, grammars). Emphasis will be placed on the quality of the translation. To achieve that end, the module will be conducted in seminar mode in order to stimulate discussion and revision of draft translations.</p>			
<b>Programme module type:</b>	Optional for all degrees involving Spanish, once compulsory modules have been taken.		
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004		
<b>Co-requisite(s):</b>	Compulsory modules for Single and Major Spanish programmes	<b>Anti-requisite(s):</b>	SP3007
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 (x 1.5-hour) seminar and 1 surgery hour.		
	<b>Scheduled learning:</b> 28 hours	<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr C O'Leary		

SP3011 History of the Spanish Language			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	2.00 pm - 3.30 pm Fri		
<p>The module explores the evolution of Spanish from Latin to the seventeenth century. A prior knowledge of Latin is not expected. In addition to linguistic and socio-political history, the module involves an introduction to the works of Spanish linguists of the period.</p>			
<b>Programme module type:</b>	Optional for a degrees involving Spanish, once compulsory modules have been taken.		
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004		
<b>Co-requisite(s):</b>	Compulsory modules for Single and Major Spanish programmes		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 (x 1.5-hour) seminar and 1 surgery hour.		
	<b>Scheduled learning:</b> 28 hours	<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr K Anipa		

**Modern Languages - Honours - Level - 2014/15 - August 2014**

<b>SP3101 Spanish Integrated Year Abroad</b>				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	May be subject to restrictions from receiving country.			
<b>Planned timetable:</b>	Please Contact Department			
<p>The objective of the module is language learning and cultural familiarisation through work placements in a Spanish speaking country. Placements will be as language assistants or on other assignments approved by the department.</p> <p>Formal learning and assessment will be through</p> <p>(i) a supervised project of 4,000 words in the target language chosen in consultation with the module coordinator. To be submitted in May.</p> <p>(ii) a series of short written pieces in the target language in the form of guided responses to questions given and relating to the year abroad experience, totalling approximately 1000 words. To be submitted at various specified points during the year, across both semesters.</p> <p>(iii) a 10-minute oral exam in the target language to be sat upon the student's return to St Andrews after the WIYA year in which the written project will be presented and discussed.</p>				
<b>Programme module type:</b>	Compulsory for all degrees involving Spanish with Integrated Year Abroad			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004. Admission to the Honours Programme with Integrated Year Abroad.			
<b>Anti-requisite(s):</b>	SP4102, SP4103 or Erasmus exchange.			
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
	<b>Weekly contact:</b> Please Contact Department			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Fernández Romero			

<b>SP3122 Spanish American Literature 2</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 10.30 am Wed			
<p>The aim of the module is to study a topic or genre in Spanish American literature. The module includes texts which are not particularly Latin American in their depiction of historical or cultural aspects of the continent, such as modernismo, River Plate cosmopolitanist literature or the novel of the Boom. The selection is likely to include three or four works by the following authors: Borges, Onetti, Cortázar, Donoso, Sábato, García Márquez, Rosario Castellanos, Alfonsina Storni, Juana de Ibarbourou. Apart from general and historical introductions, the course proceeds on the basis of seminar papers by students.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Spanish once compulsory modules have been taken, except Minor 'with Spanish' degrees			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1.5-hour seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof G San Román			

## Modern Languages - Honours Level - 2014/15 - August 2014

SP3138 Mexico in the Nineteenth Century				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 12.30 pm Wed			
Students will examine political and historical developments of Mexico in the Siglo de Caudillos (from the beginning of Independence in 1810 to the start of the Mexican Revolution in 1910). Particular attention will be given to the tensions which characterised the period - such as Church-State relations, military-civil relations, federalism versus centralism, conservatism versus liberalism, constitutionalism versus authoritarianism - and to key political leaders, 'caudillos', such as Hidalgo, Morelos, Iturbide, Santa Anna, Juarez, Maximilian and Diaz. Reading will include primary material such as letters, speeches and articles from the Mexican press as well as secondary historical studies of the period.				
<b>Programme module type:</b>	Optional for all degrees involving Spanish once compulsory modules have been taken.			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 (x 1.5-hour) seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof W M Fowler			

SP3145 Post-1975 Writing in Spain 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 12.30 pm Wed			
The aim of the module is the close study of a selection of literary texts (works of prose fiction and poetry, in the main) produced in the post-Franco period. These narratives distance themselves from the realist (and experimental) mode of writing that dominated much of the literature produced between 1939 and the 1970s. Instead, they construct subjective worlds that, nevertheless, tend towards a universality of experience and can be seen as part of a process of the gradual 'normalization', Europeanisation, and universalisation of Spanish cultural creations. The selection is likely to include five works written by authors born after the end of the Civil War, such as: A. Bautista, F. Benítez Reyes, J. Cercas, L.A. de Cuenca, L. García Montero, J Marmas, E. Mendoza, A. Muñoz Molina, A. Orejudo, A. Pérez-Reverte, S. Puértolas and A. Rosetti. In the case of poetry, a relevant anthology including some of these authors will be recommended.				
<b>Programme module type:</b>	Optional for all degrees involving Spanish once compulsory modules have been taken,			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Co-requisite(s):</b>	Compulsory modules for Single and Major Spanish programmes			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Seminar and surgery hour.			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 124 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Letrán			

**Modern Languages - Honours - Level - 2014/15 - August 2014**

<b>SP3221 Language, Conflict and Society</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Tue plus 1 seminar per week, to be arranged.			
This module aims to provide a sound understanding of important modes of literary expression in Spain and Spanish America following a source of conflict across the centuries. The syllabus will involve the study of a selection of canonical texts from Spain and Spanish America. The reading list will typically be available online as from the preceding month of May.				
<b>Programme module type:</b>	Optional for all degrees involving Spanish, once compulsory modules have been taken.			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J Letrán			

<b>SP3222 Language, Love and Loss</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am Tue, plus 1 seminar to be arranged.			
This module aims to provide a sound understanding of important modes of literary expression in Spain and Spanish America following an expression of emotional tension across the centuries. The syllabus will involve the study of a selection of canonical texts from Spain and Spanish America. The reading list will typically be available online as from the preceding month of May.				
<b>Programme module type:</b>	Optional for all degrees involving Spanish once compulsory modules have been taken			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof J Larios			

## Modern Languages - Honours Level - 2014/15 - August 2014

SP4003 Spanish Language 3				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Thu, plus 1 practical to be arranged on Tue			
The overall objective of this core module is to build on advanced skills in listening, speaking, reading and writing in Spanish. The syllabus is made up of a selection of texts in different registers (fiction, topical magazines, interviews, economic and political reports from newspapers) which provide the basis for both written and oral work in class.				
<b>Programme module type:</b>	Compulsory for all degrees involving Spanish. SP4003 or SP4103 is a compulsory for Two language degrees with a third subject outwith the School of Modern Languages or Minor degrees 'with Spanish'.			
<b>Pre-requisite(s):</b>	SP3002 (see Honours Adviser if there is a problem).	<b>Anti-requisite(s):</b>	SP4102, SP4103	
<b>Required for:</b>	SP4004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 class and 1 practical and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Fernández Romero			

SP4004 Spanish Language 4: Communication Skills				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am Thu, plus 1 practical to be arranged on Tue			
The overall objective of this core module is to build on advanced skills in listening, speaking, reading and writing in Spanish. The syllabus uses listening comprehension based on recording, debates and oral presentations by students, and a selection of texts for the study of different linguistic registers (including dialogues from fictional works, essays, and translation and rewriting of texts using a different style). The final oral examination will form part of this module.				
<b>Programme module type:</b>	Compulsory for all degrees involving Spanish.			
<b>Pre-requisite(s):</b>	SP4003, SP4103 or SP4102	<b>Co-requisite(s):</b>	SP4224 for Single and Major Spanish programmes	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 class and 1 practical and 1 surgery hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 60%, Coursework = 40%			
	<b>As used by St Andrews:</b> 15-minute Oral Examination = 30%, Aural Comprehension = 30%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Fernández Romero			

SP4008 Contemporary Spanish Language				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am Thu			
The module builds on the skills of the four Honours core language courses whose overall objective is to promote the advanced communicative skills of listening, speaking, reading and writing in Spanish. Its objective is to stimulate creative writing in Spanish in a variety of linguistic registers. The syllabus is made up of a selection of texts in different registers (but drawn basically from fiction and commercial writing) which provide the basis for creative writing exercises.				
<b>Programme module type:</b>	Optional for all degrees involving Spanish once compulsory modules have been taken.			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 class and 1 surgery hour.			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 124 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Prof W M Fowler			

SP4012 Linguistic Study of the Spanish Language				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 3.30 pm Fri			
This module presents the scientific approach to describing languages as well as the concept of linguistic variability and some of its salient manifestations in Spanish across the Hispanic world. Structural features will be treated at phonological, morphological, syntactic and lexico-semantic levels, and variation will be examined at geographical, social and stylistic levels.				
<b>Programme module type:</b>	Optional for all degrees involving Spanish once compulsory modules have been taken.			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1.5-hour seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Anipa			

## Modern Languages - Honours Level - 2014/15 - August 2014

SP4098 Dissertation on a Spanish Topic			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1 & 2 (taught twice)
<b>Availability restrictions:</b>	Available only to students in the Final year of the Honours Programme.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module offers students the possibility of personal advanced study on a topic on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The Critical Review involves the evaluation of a range of secondary material on a given subject. It should be 5,000 - 6,000 words in length, be submitted in accordance with guidelines and deadlines, and normally written in English. The topic must be formally agreed in advance with the research co-ordinator and potential supervisor. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>			
<b>Programme module type:</b>	SP4098 or SP4099 is required for Single Honours Spanish. Optional for all degrees involving Spanish once compulsory modules have been taken.		
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004		
<b>Anti-requisite(s):</b>	SP4099 or dissertation in another subject		
<b>Co-requisite(s):</b>	Compulsory modules for Single and Major Spanish programmes		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 all-group seminars plus up to 4 individual sessions with your supervisor.		
	<b>Scheduled learning:</b> 7 hours	<b>Guided independent study:</b> 143 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Dissertation = 100%		
<b>Module Co-ordinator:</b>	Dr T Berman		



**Modern Languages - Honours - Level - 2014/15 - August 2014**

<b>SP4099 Long Dissertation on a Spanish Topic</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to Single Honours students in the Final year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>The dissertation offers students the possibility of personal advanced study on a topic on which they already have adequate basic knowledge and for which a suitable Supervisor can be found. Guidance will be offered on research methods and on presentation. The dissertation will, as a rule, consist of a study of a given body of primary material in a given perspective. Its length should be 10,000 words maximum, and it should be submitted in accordance with guidelines and deadlines, and normally be written in English. The topic must be formally agreed in advance with both the research co-ordinator and the potential supervisor. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	SP4098 or SP4099 is required for Single Honours Spanish and students taking SP4102. SP4003 or SP4103 or (SP4102 with SP4099) is compulsory for all degrees involving Spanish.			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Anti-requisite(s):</b>	SP4098 or dissertation in another subject			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 all-group seminars plus up to 8 individual sessions with your supervisor.			
	<b>Scheduled learning:</b> 11 hours		<b>Guided independent study:</b> 289 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr T Bergman			

<b>SP4102 Semester with Study Abroad in Spain</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>The objective of the module is to allow students who are unable to take a year or a semester away from St Andrews in a Spanish-Speaking country to spend one term (September to December) studying in Spain at an institution with which we have a Erasmus exchange. The students will take a range of approved courses at the host university, Universitat Pompeu Fabra in Barcelona. They will also take SP4099, Spanish Dissertation; a dissertation topic will have been negotiated with their tutors before the summer recess. Preparation for SP4099 will be carried out during their stay in Spain, and continued in St Andrews during January and Semester 2. If places are available, the module can also be open to students who spent their WIYA year at a non-Spanish-speaking country, but not to those who have already spent an Erasmus year. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	SP4003 or SP4103 or (SP4102 with SP4099) is compulsory for all degrees involving Spanish, except Minor 'with Spanish' degrees.			
<b>Pre-requisite(s):</b>	SP3002	<b>Anti-requisite(s):</b>	SP4003, SP4103	
<b>Co-requisite(s):</b>	SP4099	<b>Required for:</b>	SP4004	
<b>Learning and teaching methods and delivery:</b>	This is a Study Abroad or Work Placement module.			
	<b>Weekly contact:</b> By arrangement			
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Fernández Romero			

## Modern Languages - Honours Level - 2014/15 - August 2014

SP4223 Language, History and Culture				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Tue, plus 1 seminar to be arranged.			
This module aims to provide a sound understanding of important modes of literary expression in Spain and Spanish America following the representation of different historical moments through fictions. The syllabus will involve the study of a selection of canonical texts from Spain and Spanish America. The reading list will typically be available online as from the preceding month of May.				
<b>Programme module type:</b>	Optional for all degrees involving Spanish once compulsory modules have been taken			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Anti-requisite(s):</b>	SP4102			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Fernández Romero			

SP4224 Language, Reality and Illusion				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am Tue, plus 1 seminar to be arranged.			
This module centres on the in-depth study of Don Quijote, by Miguel de Cervantes, and its cultural and literary impact. It aims to provide a sound understanding of important modes of literary expression in Spain and Spanish America following the conflict of reality and illusion across the centuries. The syllabus will involve the study of a selection of canonical texts from Spain and Spanish America. The reading list will typically be available online as from the preceding month of May.				
<b>Programme module type:</b>	For those entering Honours in 2013/4: Compulsory for Single Honours Spanish. One of SP4223 or SP4224 is compulsory for Joint Honours Spanish, Spanish and Classics. For those entering Honours in 2014/5: Compulsory for Single Honours Spanish, Joint Honours Spanish, Spanish "with" degrees			
<b>Pre-requisite(s):</b>	Pass at Grade 11 or better in SP2002 or SP2004			
<b>Co-requisite(s):</b>	SP4004 for Single, Major and Joint Spanish programmes			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar and 1 surgery hour.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr R Fernández Romero			

## School of Philosophical, Anthropological & Film Studies

### Film Studies (FM) modules

FM4099 Film Studies Dissertation			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1 or 2
<b>Availability restrictions:</b>	Available only to students in the Second Year of the Honours Programme.		
<b>Planned timetable:</b>	To be arranged.		
<p>The dissertation offers students the possibility of personal advanced study on a topic in Film Studies on which they already have adequate basic knowledge and for which a suitable supervisor can be found. Students will have the chance to work closely with a supervisor as they develop their project, and further guidance will be offered on research methods and on presentation. The dissertation will, as a rule, consist of a study of a given body of primary material in a defined perspective. Its length should be 10,000 words maximum. It should be submitted in accordance with guidelines and deadlines, and be written in English. The topic must be agreed in advance by the module convenor and chosen supervisor. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>			
<b>Programme module type:</b>	Optional for Film Studies		
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both	<b>Anti-requisite(s):</b>	Any other 4000-level dissertation module
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus individual meetings with supervisor		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Prof R Burgoyne		
<b>Lecturer(s)/Tutor(s):</b>	Prof R Burgoyne		

## Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014

FM4102 Film and Politics				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon - 2.00 pm Tue, 7.30 pm - 10.00 pm Mon (screenings)			
<p>Lenin famously called cinema “the most important art,” and since at least the 1920s, filmmakers and theorists have explored the politics of cinema and cinema’s potential as politics. Students in this module shall explore the relationship between cinema and politics by studying the theory and practice of political filmmaking. Historical readings and political writings will be assigned so that the students will have a greater understanding of the context in which the films and accompanying theory were produced. Topics examined typically include, but will not be limited to, cinema in post-revolutionary Russia and Cuba, postcolonial cinema in Africa and Asia, Third Cinema, Weimar cinema and the Frankfurt School, and new forms of resistance using digital media. In 2014/15 the module will focus, in particular, on Latin American cinema.</p>				
<b>Programme module type:</b>	Optional for Film Studies			
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus screening (of up to 3 hours).			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 245 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D Hanlon			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Hanlon			

FM4106 War and Cinema				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon - 2.00 pm Tue, 7.30 pm - 10.00 pm Mon (screenings)			
<p>The war film is one of the great modes of cinematic expression, with outstanding examples of the genre stretching from the early silent period to the contemporary era. In this module, we will explore the chronological history of the War Film, beginning with reenactments and actualities from the Spanish-American War, proceeding through treatments of World War I such as All Quiet on the Western Front, and continuing with films such as Apocalypse Now, Waltz with Bashir, and The Hurt Locker. Students will gain knowledge and awareness of the links between the history of cinema and the development of optical weaponry, the different ways the body of the soldier has been represented in war, and the shaping of cultural memory in film.</p>				
<b>Programme module type:</b>	Optional for Film Studies			
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus screening (up to 3 hours).			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 245 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof R Burgoyne			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Burgoyne			

**Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014**

<b>FM4107 Cinema and Nation</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	10.00 am - 12.00 noon Mon, 5.00 pm - 7.30 pm Thu (screenings)		
<p>This module addresses the central notion that a national cinema can be more fruitfully understood in terms of the conflicts and discrepancies within a given culture to which its constituent films give a voice. These conflicts point to the fact that film does not simply represent the homogeneous characteristics of a national culture: national cinemas can be seen as sites of contestation where the meanings and interpretations of national culture and history can be debated, dismissed or fortified. As a site, the cinema can be conceptualised as a public arena where the meanings of a culture are negotiated, not simply disseminated. What has been forgotten, what has been elided, and what should be remembered? What is the relationship between these cultural histories and the work of individual filmmakers? The module will introduce different methodologies for the study of national cinemas, either through a specific national cinema (such as the cinemas of Britain, Canada, India, Italy, South Korea or Spain) or through a comparative focus. Case studies will vary from year to year depending on staff availability. For further details, students are advised to contact module coordinator.</p>			
<b>Programme module type:</b>	Optional for Film Studies		
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus screening.		
	<b>Scheduled learning:</b> 55 hours	<b>Guided independent study:</b> 245 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr M Cowan		
<b>Lecturer(s)/Tutor(s):</b>	Dr M Cowan		

## Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014

FM4110 Images and Impact: The Uses of Film				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Tue, 4.30 pm - 7.00 pm Tue (screenings)			
Screen media, whether broadcast news, commercials, documentaries or docudramas, or even mass entertainment, are presumed to act as agents of social change. They inform us about the world around us and encourage our views and responses. This module investigates the relationship between visual media - specifically film and video - and action from historical, practical and theoretical perspectives. Examining styles and content alongside strategies of distribution and exhibition, we will explore the ways in which various producers (for instance, governmental and nongovernmental organisations, marginalised communities, social movements, and 'culture jammers') have used screen media for political and social purposes.				
<b>Programme module type:</b>	Optional for Film Studies Optional for Sustainable Development			
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus screening (up to 3 hours).			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 245 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr L Torchin			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Torchin			

FM4113 Ecocinema: The Nature of Film				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Mon, 5.00 pm - 7.30 pm Thu (screenings)			
This Honours module explores cinema's relationship to the natural environment through a combination of historical, textual, and theoretical analysis. Students will study the history of film's reliance upon both natural materials and technologies. They will consider how the environment has been represented in a range of films, including natural history films, environmentalist documentaries, art and experimental films, and popular genre films, from Hollywood westerns to science fiction and apocalypse films. And they will study the role of nature, landscape, and the environment in film theory. Specific films and theories will vary from semester to semester. For further details on the specific focus of the module for the current semester, contact the Department of Film Studies.				
<b>Programme module type:</b>	Optional for Film Studies Optional for Sustainable Development			
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar and a 3-hour screening			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 245 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr B Jacobson			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Jacobson			

**Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014**

<b>FM4114 Film Genres</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	10.00 am - 12.00 noon Tue, 4.30 pm - 7.00 pm Mon (screenings)			
<p>Film Genres will re-examine, and problematise, film genre today by exploring the topic in a variety of contexts. The module will incorporate a combination of approaches (theoretical, industrial and textual) and, in its assessments, will encourage students to think innovatively about, amongst other things, genre markers, global industry practice and exhibition culture. The module will ordinarily be organised in three related clusters. These clusters may include, but will not be limited to: Genre studies in Classical Hollywood; Genre and authorship (e.g. Hitchcock, Ford, Miike, Woo); Genre and Stars (eg. Clint Eastwood, Jackie Chan, Hugh Grant); Historicising Genre; Global genres; Genre and adaptation; Genre hybrids; Genre and blockbusters; Film Noir as a genre, cycle or mood; Genre and violence; Asian Genres; Genre and studios.</p>				
<b>Programme module type:</b>	Optional for Film Studies			
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus screening (up to 3 hours).			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 245 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr T Rice			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Rice, Prof R Burgoyne, Dr L Donaldson			

<b>FM4304 Film and Sexual Identities</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am - 12.00 noon Tue, 4.30 pm - 7.15 pm Mon (screenings)			
<p>This module aims at introducing students to the issues of sexual identities in filmic texts, to the notion of queer cinema, and to a representative corpus of films, drawn from different cinematic traditions, where sexuality and sexual orientation inform narrative and visual structures. The module will raise questions about the representation of alternative sexualities on screen, considering their implications for the construction of spectatorship, the filmic gaze, and for the wider cultural issues surrounding social identities. Students will be introduced to queer theory and to a body of relevant critical material, and will be encouraged to apply these theoretical structures to the study of cinema's diverse treatment of sexual identity. Films studied may typically include The Rocky Horror Picture Show (Jim Sharman, 1975), My Beautiful Laundrette (Stephen Frears, 1985), Ma Vie En Rose (Alain Berliner, 1995), All About My Mother (Pedro Almodovar, 1999).</p>				
<b>Programme module type:</b>	Optional for Film Studies			
<b>Pre-requisite(s):</b>	FM2001 and FM2002 – with passes at 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar plus screening (up to 3 hours).			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 245 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Girelli			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Girelli			

Music (MU) modules

MU3001 Concert Performance			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	To be arranged.		
<p>This module caters for students aiming to perform to a professional level or students wishing to go on to study performance at postgraduate level. Teaching will include instrumental/vocal lessons at the University Music Centre (comprising thirty minutes' tuition every week), masterclasses with professional musicians and weekly performance classes. Alongside the primary focus of performance, students will also receive teaching in careers and enterprise skills to assist their entry into the music profession. The marking standards for this module are similar to a performance diploma such as LRSM (Licentiate of the Associated Board of the Royal Schools of Music). The module may be especially attractive to a student preparing for such a diploma.</p>			
<b>Programme module type:</b>	Available to any degree programme.		
<b>Pre-requisite(s):</b>	MU2001 or audition		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars and 30-minute tutorials, and 10 hours participation in performance masterclasses over the semester.		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 265 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 70%, Coursework = 30%		
	<b>As used by St Andrews:</b> Coursework = 100% (Recital = 60%, Short Study= 5%, Performance classes = 10%, Written work = 25%)		
<b>Module Co-ordinator:</b>	Mr B Williams		
<b>Lecturer(s)/Tutor(s):</b>	Mr B Williams		



## Philosophy (PY) modules

PY3701 Language and Reality				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed (seminar time to be arranged).			
<p>This module covers a range of foundational issues in the philosophy of language and metaphysics. The language component will focus on some of the following questions: What is meaning? Is there a distinction between meaning and reference? What are the puzzles of reference and how should we best solve them? Is there a distinction between what is said and what is implied? The reality component will focus on some of the following questions: What is an object? What is existence? How do objects change and persist? How should we distinguish universals from particulars? Are there universals? What is time? What is causation? What is a law of nature?</p>				
<b>Programme module type:</b>	Compulsory for Single Honours Philosophy and Logic and Philosophy of Science. At least one of PY3701 and PY3702 is a compulsory for Joint Honours Philosophy.			
<b>Pre-requisite(s):</b>	PY1006	<b>Anti-requisite(s):</b>	PY3004	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Crean			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Crean, Prof H Cappelen			

PY3702 Value and Normativity				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon (seminar time to be arranged).			
<p>This module will deal with a range of core debates in contemporary metaethics, but the issues discussed have relevance across the normative domain, including in the theory of rationality and in epistemology. Metaethical positions discussed will include naturalist and non-naturalist realism, error theory, moral relativism, and expressivism. The module will also deal with the nature of moral reasons, and the relationship between morality and rationality.</p>				
<b>Programme module type:</b>	Compulsory for Single Honours Philosophy. At least one of PY3701 and PY3702 is a compulsory for Joint Honours Philosophy. Optional for Logic and Philosophy of Science.			
<b>Pre-requisite(s):</b>	PY1006	<b>Anti-requisite(s):</b>	PY3102	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J Snedegar			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Snedegar, Dr A Crean			

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PY4601 Paradoxes				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am - 12.00 pm Thu (seminar time to be arranged).			
Tensions in our understanding of our concepts and the world can often give rise to paradoxes: situations where we are led from considerations we accept and may even find obvious to conclusions which we find very surprising or even ridiculous. Probably the best way to get a feel for how to deal with paradoxes and the issues which lie behind them is to examine a variety of paradoxes, both ancient and contemporary.				
<b>Programme module type:</b>	Optional for Philosophy, Logic and Philosophy of Science			
<b>Pre-requisite(s):</b>	PY3701 or PY2002 (pre-or co-requisite(s))			
<b>Co-requisite(s):</b>	PY3701 or PY2002 (pre- or co-requisite(s))			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr P Greenough			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Greenough			

PY4614 Philosophy of Mind				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue (seminar time to be arranged).			
This module introduces topics of central interest in contemporary philosophy of mind. As well as surveying the main twentieth century approaches to the mind-body problem the module will cover various contemporary issues relating to consciousness and intentionality. The module also illustrates the way in which work in other disciplines such as experimental psychology, neuroscience and artificial intelligence can inform philosophical theorising about the mind. Topics may vary slightly from year to year but are likely to include a number of the following: dualism, identity theories, behaviourism, functionalism, folk psychology, the 'Language of Thought' hypothesis, eliminative materialism, connectionism, anomalous monism, mental causation, modularity, phenomenal consciousness.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.			
<b>Pre-requisite(s):</b>	PY1006	<b>Anti-requisite(s):</b>	PY3002	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Prosser			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Prosser			

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<b>PY4617 The Philosophy of Saul Kripke</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu (seminar time to be arranged)			
The purpose of this module is to explore the work and influence of contemporary philosopher Saul Kripke. Topics may include the semantics and meta-semantics of names, the semantics of attitude attributions, the metaphysics of modality, the use of possible worlds in semantics, epistemic possibility, fiction and non-existence, identity over time, rule-following and private language, and the mind-body problem.				
<b>Programme module type:</b>	Optional for Philosophy, Logic and Philosophy of Science			
<b>Pre-requisite(s):</b>	PY3701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr E Glick			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Glick			

<b>PY4619 Social Philosophy</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Wed (seminar time to be arranged)			
This module is an introduction to contemporary issues and arguments in social philosophy. It will provide some historical introduction and an account of certain key concepts, such as public versus private and individual versus common goods. It will then engage a number of areas of social life and action (such as, for instance, culture, art, economics, law, education, environment) examining contested values and policies. The broad orientation is towards 'practical philosophy'.				
<b>Programme module type:</b>	Optional for Philosophy			
<b>Pre-requisite(s):</b>	PY3702 (pre-or co-requisite)			
<b>Co-requisite(s):</b>	PY3701 (pre- or co-requisite)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof J Haldane			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Haldane			

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PY4622 Kant's Critical Philosophy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Tue (seminar time to be arranged).			
<p>The purpose of this module is twofold. First, it examines the foundations of Kant's critical philosophy, often called 'transcendental idealism'. For this purpose, we shall read selections from Kant's Prolegomena (1783). Secondly, it will explore one of the three 'Critiques' Kant wrote as examples of this system: either (i) The Critique of Pure Reason (1781/87, describing the 'Copernican Turn' in Metaphysics and Epistemology), (ii) the Critique of Practical Reason (1788, a further exploration of the ethical theory of categorical commands as familiar from the Groundwork) or (iii) the Critique of Judgement (1790, Kant's theory of art and aesthetic judgement).</p>				
<b>Programme module type:</b>	Optional for Philosophy, Logic and Philosophy of Science			
<b>Pre-requisite(s):</b>	PY1006	<b>Anti-requisite(s):</b>	PY4811	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr J Timmermann			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Timmermann			

PY4624 Philosophy of Art				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Tue (seminar time to be arranged).			
<p>What makes an object a work of art? Are artworks always physical objects, or can they be mental, or abstract, entities? Can good art be morally bad? How is conceptual art to be understood, and appreciated? This module examines some of the fundamental contemporary debates in philosophy of art, including issues concerning the nature and definition of art, problems regarding representation and expression (how exactly do works of art represent, or express anything?), the relation of art to ethics, and the value of art. In the course of addressing these issues, we will read the work of aestheticians from ancient times to the present day.</p>				
<b>Programme module type:</b>	Optional for Philosophy			
<b>Pre-requisite(s):</b>	PY1006	<b>Anti-requisite(s):</b>	PY4812	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> Coursework = 60%, Take-Home Examination = 40%			
<b>Module Co-ordinator:</b>	Dr L Jones			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Jones			

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<b>PY4626 Life and Death</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon (seminar time to be arranged).			
<p>How should we think about moral problems concerning life and death? Choices about whose life to save and whom to allow to die have to be made, in health services and elsewhere. Some actions which aim at good ends will endanger lives. How should we think about decisions such as these? This module is not a 'moral problems' module. Instead it deals with the following general questions concerning life and death: Is death bad? In virtue of what is life good? Is there a morally significant difference between killing and letting die, or between intending someone's death and merely foreseeing it? On what principles would one choose between lives, when the choice is forced? How should future lives be taken into account in present decisions?</p>				
<b>Programme module type:</b>	Optional for Philosophy, Logic and Philosophy of Science			
<b>Pre-requisite(s):</b>	PY1006	<b>Anti-requisite(s):</b>	PY4826	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr L Jones			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Ashford, Dr L Jones			

<b>PY4634 Philosophy of Logic</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Mon (seminar time to be arranged).			
<p>The module covers philosophical issues that arise in connection with the logical notions of truth and consequence. We will consider several important theories of truth. What are the correct bearers of truth (e.g. sentences, propositions)? Does truth consist in correspondence to facts? Or is truth a more pragmatic or explanatorily thin property? Can truth be defined? Does truth have one nature, or many natures, or none at all? Secondly, we will consider several important theories of logical consequence.</p> <p>How is consequence related to truth? Does the correct theory of consequence involve proofs or models? Is logic revisable, or is it a presupposed foundation for any such revision? Is logic normative for thought or otherwise related to rationality? Finally, are there many correct consequence relations, or only one, or none at all?</p>				
<b>Programme module type:</b>	Optional for Philosophy, Logic and Philosophy of Science			
<b>Pre-requisite(s):</b>	PY3701	<b>Anti-requisite(s):</b>	PY4804	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr A Cotnoir			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Cotnoir			

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PY4639 Philosophy of Creativity				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am - 12.00 pm Tue (seminar time to be arranged).			
This module examines some of the fundamental issues in the philosophy of creativity. Topics typically covered may include the definition of 'creativity'; the relation of creativity to imagination; the nature of the creative process; the relation of creativity to knowledge and skill; computational theories of creativity; Darwinian theories of creativity; the relation of creativity to tradition; whether creativity is a kind of virtue and its relation to moral and intellectual virtues; and whether creativity differs fundamentally between the arts and the sciences.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.			
<b>Pre-requisite(s):</b>	PY1006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof B Gaut			
<b>Lecturer(s)/Tutor(s):</b>	Prof B Gaut			

PY4642 Trust, Knowledge and Society				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Thu (seminar time to be arranged).			
Traditional epistemology often focuses on the individual knower in isolation. In contrast, this module explores the ways in which our relations to other people affect what we can know. We begin by focusing on trust and testimony. Under what conditions can we obtain knowledge from one another? Do we need prior evidence of other people's trustworthiness, or can we take what they say at face value? Do we have a moral obligation to take other people seriously as informants? Can groups of people collectively know something even if none of the individual members knows it? Moving on, we will discuss the following questions: do we require less evidence to trust those with whom we have special relationships of love and friendship? Can two people who confront the same evidence rationally form different beliefs? To what extent can there be non-evidential reasons to believe, as opposed to non-evidential causal effects on belief?				
<b>Programme module type:</b>	Optional for Philosophy, Logic and Philosophy of Science			
<b>Pre-requisite(s):</b>	PY1006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof J Brown			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Brown, Professor K Hawley			

**Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014**

<b>PY4643 Philosophy of Law</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	1.00 am - 1.00 pm Wed (seminar time to be arranged).		
The purpose of this module is to explore such topics in and concerning law as the nature of law; legal reasoning; the justification of punishment; the proper scope of the criminal law (with particular attention to paternalism and legal moralism); the principles of criminal liability and mens rea issues; justifications and excuses; and specific defences in the criminal law such as self-defence and the heat of passion defence.			
<b>Programme module type:</b>	Optional for Philosophy, Logic and Philosophy of Science		
<b>Pre-requisite(s):</b>	PY1006		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	TBC		
<b>Lecturer(s)/Tutor(s):</b>	TBC		

<b>PY4646 Reasons for Action and Belief</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Thu (seminar time to be arranged).		
In considering what we ought to do and believe we consider what reasons we have. For example, in deciding whether I should become a vegetarian or whether I should believe that climate change is occurring, I consider reasons for and against these things. The module will consider the nature of reasons and their relationship to claims about what I ought to do and believe. Since reasons are central to ethics, practical rationality, and epistemology, understanding reasons is crucial for understanding a huge swathe of philosophy. We explore these issues from both an epistemological and a practical perspective.			
<b>Programme module type:</b>	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science		
<b>Pre-requisite(s):</b>	PY1006		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Prof J Brown		
<b>Lecturer(s)/Tutor(s):</b>	Prof J Brown, Dr J Snedegar		

## Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014

PY4647 Humans, Animals, and Nature				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 3.00 pm Mon (2-hour seminar time to be arranged).			
<p>This module is an examination of the place of human beings in nature. Possible topics to be discussed include: (1) Whether humans might have moral dominion over other beings in virtue of their greater psychological sophistication. (2) What should be said about those humans who are psychologically stunted for one reason or another, and especially whether their species membership on its own puts moral demands on the rest of us. (3) Whether humans might be either obligated or at least permitted to intervene in nature so as to make it a happier and more peaceful place. (4) Whether the state has obligations to animals. Over the course of the semester we will see what the various moral perspectives, such as for instance consequentialism, Kantianism, contractarianism, and Aristotelianism, have to say about these questions.</p>				
<b>Programme module type:</b>	Optional for Philosophy (What about Logic & Philosophy of Science)?			
<b>Pre-requisite(s):</b>	PY1006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr B Sachs			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Sachs			

PY4648 Conceptual Engineering and its Role in Philosophy				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Tue (seminar time to be arranged).			
<p>The module provides an introduction to the ways in which we can criticise and improve our concepts – what is sometimes called ‘conceptual engineering’.</p> <p>The concepts we have can be problematic for a number of reasons: they can be politically or ethically objectionable, inconsistent, unacceptably indeterminate or vague, or have other undesirable features. One task of philosophy is to discover such conceptual deficiencies and provide strategies for improving our conceptual repertoire. We may ask, for instance: should a theory of truth describe our concept of truth, or replace it with a better one? Is one goal of political philosophy to improve the concepts we use for thinking about social reality? If the answer to such questions is yes, then how do we go about doing it?</p>				
<b>Programme module type:</b>	Optional for Philosophy and Logic and Philosophy of Science			
<b>Pre-requisite(s):</b>	PY1006			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 267 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof H Cappelen			
<b>Lecturer(s)/Tutor(s):</b>	Prof H Cappelen			



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<b>PY4698 Dissertation (Whole Year)</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	Not applicable			
This module aims to develop the philosophical skills of literature review, accurate exposition, clear analysis, and critical thinking for oneself, by writing a dissertation on a selected topic, with the supervision of a tutor. A student must secure the agreement of a member of staff to supervise the work, and submit the appropriate application form for the approval of the Honours Adviser before the end of advising Semester One.				
<b>Programme module type:</b>	Optional for Philosophy and Logic and Philosophy of Science			
<b>Anti-requisite(s):</b>	PY4699, PY4701			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Monthly meetings over two semesters.			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 292 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			

<b>PY4699 Dissertation in Philosophy</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	Not applicable			
This module aims to develop the philosophical skills of literature review, accurate exposition, clear analysis, and critical thinking for oneself, by writing a dissertation on a selected topic, with the supervision of a tutor. A student must secure the agreement of a member of staff to supervise the work, and submit the appropriate application form for the approval of the Honours Adviser before the end of advising Semester One.				
<b>Programme module type:</b>	Optional for Philosophy and Logic and Philosophy of Science			
<b>Anti-requisite(s):</b>	PY3803, PY4698, PY4701, PY4802			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Fortnightly meetings over one semester.			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 292 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			

## Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014

PY4701 Philosophy and Pedagogy				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1 or 2
<b>Availability restrictions:</b>	Available only to students taking ID4002 in same semester.			
<b>Planned timetable:</b>	Not applicable			
This module is a complement to ID4002 - Communication and Teaching in Arts & Humanities (a placement module in which students gain substantial experience of a working educational environment, and of communicating philosophical ideas or themes to school pupils). In this module, students will have the opportunity to carry out further study into the place of philosophy in education and/or the role of philosophy in teaching. This is a guided self-study module, which will be supervised by a member of philosophy staff. It is available only to participants in ID4002.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science, but only for those taking ID4002			
<b>Co-requisite(s):</b>	ID4002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Fortnightly supervision sessions.			
	<b>Scheduled learning:</b> 6 hours		<b>Guided independent study:</b> 144 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof J J Haldane			
<b>Lecturer(s)/Tutor(s):</b>	Prof J J Haldane			

## Social Anthropology (SA) modules

SA3031 Anthropological Study of Language and Culture				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
This module examines central theoretical approaches within anthropology that take as their focus issues relating to the analyses of language and of culture. The module concentrates on methodological concerns deriving from theories of language, and it deals with the problems of interpretation of both language and culture as systems of symbols and meanings.				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof P G Gow			
<b>Lecturer(s)/Tutor(s):</b>	Prof P G Gow			

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<b>SA3055 Anthropology and History</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>The relationship between anthropology and history has been a source of controversy, yet similar problems of representation and knowledge affect both history and anthropology. Is history simply the way we view the past in the present? Is knowledge of past presents and imagined futures also necessary for understanding the underlying dynamics of any ethnographic present? What methods can give us access to different historical voices? Do different conceptions of Time oblige us to question absolute chronology? We will examine the importance of studying traces of the past (e.g. archaeology, archives, memory) as part of fieldwork, and the uses of subaltern, micro and counterfactual histories for subverting dominant teleologies.</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50% (Take-Home Examination in 2014-15)			
<b>Module Co-ordinator:</b>	Dr S Hyland			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Hyland			

<b>SA3057 Sex and Gender</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides a cross-cultural perspective on sex and gender, and explores both anthropological and local understandings of personhood, masculinity, femininity and the sexed body. The module links gender relations to wider economic and political processes, and to the exercise of power and of resistance. As well as looking at non-Western societies, the module examines the West, and questions the extent to which Western understandings to do with biology, sex, gender and the body can be used as analytical tools in cross-cultural comparison.</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr P Gay y Blasco			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Gay y Blasco			

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SA3059 Colonial and Post-Colonial Representations				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
How do 'we' see Africa? How does Africa 'look' back? Drawing our examples from visual media, we will explore how the colonial imaginations of Africa, from Tarzan to Tribe, have distorted our knowledge of the continent. How does this particular version of Orientalism work? How does it shape ideas of anthropology, tourism, conservation and development? Has decolonisation and post-colonialism changed this? Including the works of such filmmakers as Rouch, Sembene and Teno, we will see how Africa has come to 'shoot' back and challenge the way 'we' see the world.				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr M Frankland			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Frankland			

SA3060 Contemporary Issues in Social Anthropology				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
these issues contribute to the discipline. The purpose of the module is to provide a forum in which students can learn about theoretical and empirical themes that are at the leading edge of current anthropological research. The content and focus will therefore shift from year to year in line with new intellectual developments in the discipline.				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture, 1 x 2-hour seminar.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr M High			
<b>Lecturer(s)/Tutor(s):</b>	Dr M High			

**Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014**

<b>SA3064 The Anthropology of Migration</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>This module will offer students the opportunity to examine past and present theoretical debates on migration. It will look at the ways in which major social, political and economic shifts at local and global level have contributed to the making and re-making of migrant subjectivities and identities in a globalised world. The module will focus specifically on a series of interconnected debates on cosmopolitanism, migration, citizenship and multiculturalism. This is intended to increase students' awareness of the active role played by migrants in wider political, social, and economic transformations, and for current anthropological debates on agency and personhood, on gender and intimacy, on subjectivity and identity.</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar per week and 2 hours film/video viewing in total.			
	<b>Scheduled learning:</b> 24 hours		<b>Guided independent study:</b> 276 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr M Fumanti			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Fumanti			

<b>SA3506 Methods in Social Anthropology</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Not available to General Degree students			
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides an introduction to the various methods of enquiry and interpretation used in social anthropological research. It aims to give the student an account, in historical and contemporary perspectives, of the development of anthropological methodologies and research techniques. It also aims to equip them with a range of basic skills and procedures which they can apply at a later date to their own research-based projects. The module will provide knowledge of a wide range of research methods used by anthropologists, and encourage a critical awareness of the theoretical assumptions and potential problems associated with the use of such methods.</p>				
<b>Programme module type:</b>	Compulsory for students studying Single Honours, Joint Honours and Major degrees in Social Anthropology who intend to go on to take SA4099. Optional for Social Anthropology without SA4099.			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A D E Reed			
<b>Lecturer(s)/Tutor(s):</b>	Dr A D E Reed			

Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014

SA4005 The West Indies and the Black Atlantic				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The West Indies is an anomalous region in relation to the classic aim of anthropology to study small-scale non-Western societies. The modern Caribbean, created out of the slave plantation system and the transportation of millions of Africans and others from the old to the New world, brought into being entirely novel forms of transatlantic culture. This module asks students to rethink the distinction between Western and non-Western culture and to consider the meaning of 'modern' as opposed to 'traditional' society. The Creole cultures of the Caribbean are explored in depth as are the transmigrant experience of many West Indians in metropolitan centers in the first world.</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr H O B Wardle			
<b>Lecturer(s)/Tutor(s):</b>	Dr H O B Wardle			

SA4060 Anthropology of Religion and Politics				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	To be arranged.			
<p>The intention of this module is to analyse the impact of religion on politics in societies around the world in order to understand the global context of religious movements from an anthropological perspective. This is achieved by examining ethnographic literature on Christianity in the Americas, Hinduism in India, and Islam as both local and global religions. In particular, the course focuses on the notions of fundamentalism and religious nationalism and assesses these terms in relation to both conservative religious movements and religious resistance movements that emerge in response to social oppression.</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar, 1 x 1-hour film viewing			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr L Newland			
<b>Lecturer(s)/Tutor(s):</b>	Dr L Newland			

**Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014**

<b>SA4098 Library-based Dissertation</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students taking Single Honours, Joint Honours and Major Degrees			
<b>Planned timetable:</b>	To be arranged.			
<p>The module consists of a supervised exercise in social anthropological enquiry. This will include a library-based independently researched dissertation.</p> <p>(Guidelines for printing and binding dissertations can be found at:  <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Anti-requisite(s):</b>	SA4099			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour tutorial.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> 7,500-word Dissertation = 100%			

<b>SA4099 Primary Research-based Dissertation</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students taking Single Honours, Joint Honours and Major Degrees			
<b>Planned timetable:</b>	To be arranged.			
<p>This module allows advanced undergraduate students to engage in a supervised research project on a topic of their choice. Student will apply theoretical and substantive knowledge from the discipline of social anthropology to a body of ethnographic data obtained from fieldwork and bibliographic sources.</p> <p>(Guidelines for printing and binding dissertations can be found at:  <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA3506	<b>Anti-requisite(s):</b>	SA4098	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour tutorial.			
	<b>Scheduled learning:</b> 44 hours		<b>Guided independent study:</b> 256 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> 10,000-word Dissertation = 100%			

Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014

SA4857 West Africa				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The module examines some of the central themes in anthropological studies of the history and social organisation of West African peoples. West Africa has been the source of much innovative work relevant to the broader field of social anthropological theory. Attention will be given to a selected set of topics from the literature. The module will give an appreciation of the cultural particularities of the region as well as an awareness of the wider theoretical importance of the selected topics.				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar per week and fortnightly tutorial.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 270 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof R Dilley			
<b>Lecturer(s)/Tutor(s):</b>	Prof R Dilley			

SA4862 Imagining the World: The Anthropology of Consciousness				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
The anthropology of consciousness is central to contemporary anthropology. This module shows how significant ethnographic studies are for understanding certain aspects of consciousness and for the development of theory in this domain.				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Prof C Toren			
<b>Lecturer(s)/Tutor(s):</b>	Prof C Toren			



**Philosophical, Anthropological & Film Studies - Honours Level - 2014/15 - August 2014**

<b>SA4865 Ethnohistories of the Americas</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module is designed to introduce students to anthropological and historical perspectives on Americas (with specific focus on South America). A convenient cover term for the way the material is approached is ethnohistorical. Emphasis will be on the study of particular problems identified by anthropologists and historians. These include topics such as whether contemporary indigenous people are a reliable guide to understanding pre-European conquest societies, how can we understand the cultural mixtures that occurred between African, American and European traditions, the impact of colonialism and neo-colonialism on indigenous and peasant people, and the relationship of people to their environment and so on. The attention to 'problems' highlights the importance this module will give to 'ways of knowing' about other societies. Can we rely on what people tell us they know? Can historical documents be of use to ethnographers? In this course you will attempt to answer these questions for yourselves through various practical projects and tasks.</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Harris			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Harris			

<b>SA4866 Anthropology and Eurasia</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	To be arranged.			
<p>This module forms an important introduction to the anthropology and history of the Eurasian region. It draws on Russian and Soviet ethnographies alongside more recent European and American anthropological studies, addressing the Soviet period and life post-independence. Peoples covered in this module are from the five former Soviet Central Asian states, along with groups from Mongolia, South Siberia, and Xinjiang. The module provides a broad overview of regional ethnography alongside relevant anthropological themes. These include pastoral nomadism and oasis life; socialism and post-socialism; human-environment relations and ecological issues; Islam and shamanism; food and feasting; oral epics and popular culture; and domestic practices.</p>				
<b>Programme module type:</b>	Optional for Social Anthropology			
<b>Pre-requisite(s):</b>	SA2001 and SA2002 with passes at grade 11 or better in both			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar, 1 hour of film/video viewing			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 278 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Bunn			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Bunn			



## School of Physics & Astronomy

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Astronomy (AS) Modules

AS3013 Computational Astrophysics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 5.30 pm Mon and Thu			
<p>The aim of this module is to introduce students to computational methods in astrophysics. Based on a general introduction to the programming language Fortran-90, students are shown how to apply simple numerical algorithms to calculate integrals, iteratively find the roots of non-linear equations, solve systems of ordinary differential equations, and to develop tools for statistical data analysis. Further emphasis is put on the development of skills to make convincing plots from the calculated data. The practical exercises include applications to the initial mass function in star formation, the calculation of orbits for N-body gravitational problems and in mean galactic potentials, and planet transition light-curves. Students gain experience with the basics of numerical accuracy, and the development of problem-solving algorithms in general."</p>				
<b>Programme module type:</b>	Compulsory for Astrophysics Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	AS2001 or AS2101, PH2011, PH2012, MT2001 or (MT2501 and MT2503)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 3.5-hour supervised or taught sessions (x 11 weeks). Mostly hands-on guided work on computers, but with occasional presentation.			
	<b>Scheduled learning:</b> 77 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework (practical work, the submission of computer code and computational solutions to given problems) = 100%			
<b>Module Co-ordinator:</b>	Dr P Voitke,			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Voitke, Dr C Helling			

Physics & Astronomy - Honours Level - 2014/15 - August 2014

AS4010 Extragalactic Astronomy			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	12.00 noon Mon, Tue, Thu		
<p>This module introduces the basic elements of extragalactic astronomy. This includes the morphological, structural and spectral properties of elliptical, spiral, quiescent and star-forming galaxies. We study how galaxy populations change from the distant galaxies in the early Universe into those observed in our local neighbourhood, including the coincident growth of super massive black holes at the centres of massive galaxies. Galaxy formation theory is introduced in relation to the growth of structure in a cold-dark matter, and galaxy evolution in regions of high and low density is investigated. The module includes a look at modern instrumentation used in extragalactic astrophysics.</p> <p>Specialist lecturers from within the galaxy evolution research group will provide a direct link between material learnt in lectures and research currently being undertaken at the University of St Andrews.</p>			
<b>Programme module type:</b>	Compulsory for Astrophysics BSc and MPhys Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
<b>Pre-requisite(s):</b>	AS2001 or AS2101, PH2011, PH2012, MT2001 or (MT2501 and MT2503)	<b>Anti-requisite(s):</b>	AS4022 Cosmology and AS3011 Galaxies
<b>Required for:</b>	AS5003 unless other pre-requisites for that module met.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures occasionally replaced by tutorials		
	<b>Scheduled learning:</b> 30 hours	<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%		
<b>Module Co-ordinator:</b>	Dr V Wild,		
<b>Lecturer(s)/Tutor(s):</b>	Dr V Wild, Dr A M Weijmans		

**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>AS4011 The Physics of Nebulae and Stars 1</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	10.00 am Mon, Tue, Thu			
<p>This module introduces the physics of astrophysical plasmas, as found in stars and interstellar space, where interactions between matter and radiation play a dominant role. A variety of absorption, emission, and scattering processes are introduced to describe exchanges of energy and momentum, which link up in various contexts to control the state and motion of the matter, to regulate the flow of light through the matter, and to impress fingerprints on the emergent spectrum. The theory is developed in sufficient detail to illustrate how astronomers interpret observed spectra to infer physical properties of astrophysical plasmas. Applications are considered to photo-ionise nebulae, interstellar shocks, nova and supernova shells, accretion discs, quasar-absorption-line clouds, radio synchrotron jets, radio pulsars, and x-ray plasmas. Monte-Carlo computational techniques are introduced to model radiative transfer.</p>				
<b>Programme module type:</b>	Compulsory for Astrophysics MPhys At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are compulsorys for Astrophysics BSc Optional for Astrophysics, Physics BSc Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics MPhys			
<b>Pre-requisite(s):</b>	AS2001 or AS2101, PH2011, PH2012, MT2001 or (MT2501 and MT2503), PH3081 or PH3082 or MT2003 or (MT2506 and MT2507)	<b>Anti-requisite(s):</b>	AS4023, AS3015	
<b>Required for:</b>	AS4012 The Physics of Nebulae and Stars 2			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures occasionally replaced by whole-group tutorials.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr K Wood			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Wood			

Physics & Astronomy - Honours Level - 2014/15 - August 2014

AS4012 The Physics of Nebulae and Stars 2			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	11.00 am odd Mon, Wed, Fri, 3.00 pm even Tue		
<p>This module develops the physics of stellar interiors and atmospheres from the basic equations of stellar structure introduced in AS2001/AS2101 using the radiative transfer concepts developed in Nebulae and Stars I. Topics include: the equation of state that provides pressure support at the high temperatures and densities found in normal and white-dwarf stars; the interaction of radiation with matter, both in terms of radiation-pressure support in super-massive stars and in terms of the role of opacity in controlling the flow of energy from the stellar interior to the surface; the equation of radiative transfer and the effects of local temperatures, pressures and velocity fields on the continuum and line absorption profiles in the emergent spectrum. Computer-aided tutorial exercises illustrate the computational schemes that represent one of the triumphs of late twentieth-century physics, in their ability to predict the observable properties of a star from its radius and luminosity, which in turn are determined by its mass, age and chemical composition.</p>			
<b>Programme module type:</b>	Compulsory for Astrophysics MPhys At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are compulsorys for Astrophysics BSc Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
<b>Pre-requisite(s):</b>	AS4011 The Physics of Nebulae and Stars	<b>Anti-requisite(s):</b>	AS4023, AS3015
<b>Co-requisite(s):</b>		<b>Required for:</b>	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures occasionally replaced by whole-group tutorials.		
	<b>Scheduled learning:</b> 30 hours	<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%		
<b>Module Co-ordinator:</b>	Prof A C Cameron		
<b>Lecturer(s)/Tutor(s):</b>	Prof A C Cameron and Dr P Woitke		

**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>AS4015 Gravitational and Accretion Physics</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon odd Mon, Wed, Fri, 3.00 pm even Mon			
<p>This theoretical module is open to both physics and astrophysics students. It aims to explore the basics of gravitational dynamics and its application to systems ranging from planetary and stellar systems to clusters of galaxies. The dynamics responsible for the growth of super-massive black holes in galaxies and the accretion discs in stellar systems are also covered. Starting from two-body motion and orbits under a central-force law, the module describes the calculation of extended potentials and their associated orbits. The use of the virial theorem and the statistical treatment of large numbers of selfgravitating bodies is then developed with application to stellar systems. Applications of these methods are made to several different astrophysical objects ranging from collisions in globular clusters to the presence of dark matter in the universe.</p>				
<b>Programme module type:</b>	<p>At least 2 of AS4015, AS4025, PH4031 are compulsory for Astrophysics MPhys</p> <p>At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are compulsory for Astrophysics BSc</p> <p>Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics</p>			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 (or MT2501 and MT2503), (PH3081 or PH3082 or MT2003 or [MT2506 and MT2507])			
<b>Anti-requisite(s):</b>	AS4021			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures occasionally replaced by whole-group tutorials.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof I Bonnell			
<b>Lecturer(s)/Tutor(s):</b>	Prof I Bonnell			

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

AS4025 Observational Astrophysics			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	2.00 pm - 5.30 pm Mon and Thu, plus some nights.		
<p>This is an observational and laboratory-based module that introduces students to the hands-on practical aspects of planning observing programmes, conducting the observations and reducing and analysing the data. Students use the James Gregory Telescope for CCD imaging and structural analysis of galaxies, and for CCD photometry of transiting exoplanet candidates. Further sources of data may be made available from international observatories. Observations are also secured at the University Observatory using a student-built radio telescope to observe low-frequency radio emission from the Galactic plane.</p> <p>Students gain experience in observation, data analysis, the UNIX operating system, standard astronomical software packages and modelling, and report writing.</p>			
<b>Programme module type:</b>	<p>At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are compulsory for Astrophysics BSc</p> <p>Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics</p>		
<b>Pre-requisite(s):</b>	AS2001 or AS2101, PH2011, PH2012, (MT2001 or [MT2501 and MT2503])		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 3.5-hour laboratories plus supervised work in the observatory.		
	<b>Scheduled learning:</b> 78 hours	<b>Guided independent study:</b> 72 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr C Cyganowski		
<b>Lecturer(s)/Tutor(s):</b>	Dr A Scholz, Dr J Greaves, Dr P A S Cruickshank, Dr C Cyganowski		



**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>AS4103 Astrophysics Project (BSc)</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to BSc Astrophysics students, and normally only in their final year.		
<b>Planned timetable:</b>	Half time in second semester, plus some preparation in first semester.		
<p>The project aims to develop students' skills in searching the appropriate literature, in experimental and observational design, the evaluation and interpretation of data, and the presentation of a report. The main project is preceded by a review essay. There is no specific syllabus for this module. Students taking the BSc degree select a project from a list of those which are available, and are supervised by a member of the academic staff. Project choice and some preparatory work is undertaken in semester one, but around 29 of the 30 credits' worth of work is normally undertaken in semester two.</p> <p>The aim is that students provide the intellectual drive for the project work, and should take on a role similar to that of a research student in the School. Support will be offered by the academic staff member(s) supervising the project and usually also by other members of a research team. Many projects will be carried out in the School's computing clusters, but other arrangements are possible. The review essay that precedes the observational/computational work is worth 10 credits, i.e. should have about 100 hours of work invested in it. This work is expected to be directly useful to the subsequent studies.</p>			
<b>Programme module type:</b>	Compulsory for Astrophysics BSc		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), AS3013, PH3081, PH3012 Entry to final year of BSc Astrophysics programme.		
<b>Anti-requisite(s):</b>	AS5101, PH4111, PH5101, PH5102		
<b>Learning and teaching methods and delivery:</b>	<p><b>Weekly contact:</b> Project students work "half-time" on their project through semester 2. All students must meet weekly with their project supervisor and attend fortnightly meetings with their peer-support group. Most projects are based in computer clusters in the School, where students can benefit from peer support and informal interaction with academic supervisor and other members of research teams. It is expected that the 20 hours a week will be primarily in this environment.</p>		
	<b>Scheduled learning:</b> 140 hours	<b>Guided independent study:</b> 160 hours	
<b>Assessment pattern:</b>	<p><b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%</p>		
	<p><b>As used by St Andrews:</b> Coursework (Review Article, Project Report, Presentation and Oral Examination) = 100%</p>		
<b>Module Co-ordinator:</b>	Dr J Greaves		
<b>Lecturer(s)/Tutor(s):</b>	Astronomy staff		

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

AS5001 Advanced Data Analysis			
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b> 1
<b>Academic year:</b>	2014/5		
<b>Availability restrictions:</b>	This module is intended for students in the final year of an MPhys or MSci programme involving the School		
<b>Planned timetable:</b>	9.00 am Tue, Thu, 10.00 am Mon, 12.00 noon Thu and 3.00 pm - 5.00 pm Tue (Lab)		
This module develops an understanding of basic concepts and offers practical experience with the techniques of quantitative data analysis. Beginning with fundamental concepts of probability theory and random variables, practical techniques are developed for using quantitative observational data to answer questions and test hypotheses about models of the physical world. The methods are illustrated by applications to the analysis of time series, imaging, spectroscopy, and tomography datasets. Students develop their computer programming skills, acquire a data analysis toolkit, and gain practical experience by analyzing real datasets.			
<b>Programme module type:</b>	At least two of AS5001, AS5002, and AS5003 must be taken for MPhys Astrophysics Optional for Physics MPhys, Theoretical Physics, Theoretical Physics and Mathematics		
<b>Pre-requisite(s):</b>	Familiarity with scientific programming language essential, for example through AS3013 Computational Astrophysics or PH4030 or PH3080 Computational Physics. Entry to an MPhys programme or entry to a taught postgraduate programme in the School.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials and some supervised computer lab sessions		
	<b>Scheduled learning:</b> 30 hours	<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Prof A C Cameron		
<b>Lecturer(s)/Tutor(s):</b>	Prof A C Cameron		

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

AS5002 Magnetofluids and Space Plasmas				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	This module is intended for students in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	11.00 am Mon, Tue, Thu			
<p>This module is aimed at both physics and astrophysics students with interests in the physics of plasmas. The interaction of a magnetic field with an ionized gas (or plasma) is fundamental to many problems in astrophysics, solar-terrestrial physics and efforts to harness fusion power using tokamaks. The syllabus comprises: Solar-like magnetic activity on other stars. The basic equations of magneto-hydrodynamics. Stellar coronae: X-ray properties and energetics of coronal loops. Energetics of magnetic field configurations. MHD waves and propagation of information. Solar and stellar dynamos: mean field models. Star formation: properties of magnetic cloud cores, magnetic support. Physics of accretion discs: transport of mass and angular momentum. Accretion on to compact objects and protostars. Rotation and magnetic fields in protostellar discs. Rotation distributions of young solar-type stars. Magnetic braking via a hot, magnetically channelled stellar wind.</p>				
<b>Programme module type:</b>	At least two of AS5001, AS5002, and AS5003 must be taken for MPhys Astrophysics Optional for Physics MPhys, Theoretical Physics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	(PH2012 or MT3601), (PH3081 or PH3082 or MT2003 (or MT2506 and MT2507)), PH4031 is strongly recommended. Entry to an MPhys programme			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof M M Jardine			
<b>Lecturer(s)/Tutor(s):</b>	Prof M M Jardine			

AS5003 Contemporary Astrophysics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to MPhys Astronomy students or a taught postgraduate programme in the School.			
<b>Planned timetable:</b>	12.00 noon Wed, Fri and 3.00 pm Mon			
<p>This module will provide an annual survey of the latest, most interesting, developments in astronomy and astrophysics at the research level. Emphasis will be placed upon the application of knowledge and expertise gained by students in their other modules to these current research topics.</p>				
<b>Programme module type:</b>	At least two of AS5001, AS5002, and AS5003 must be taken for MPhys Astrophysics			
<b>Pre-requisite(s):</b>	AS4010, AS4012, PH3061, PH3081.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr C Helling			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Helling and others			

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

AS5101 Astrophysics Project (MPhys)			
<b>SCOTCAT Credits:</b>	60	SCQF Level 11	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Available only to final year MPhys Astronomy students		
<b>Planned timetable:</b>	Full time in second semester, plus some preparation in first semester.		
<p>The project aims to develop students' skills in searching the appropriate literature, in experimental and observational design, the evaluation and interpretation of data, and the presentation of a report. The main project is preceded by a review essay. There is no specific syllabus for this module. Students taking the M. Phys. degree select a project from a list of those which are available, and are supervised by a member of the academic staff. Project choice and some preparatory work is undertaken in semester one, but normally most of the 60 credits' worth of work is undertaken in semester two.</p> <p>The aim is that students provide the intellectual drive for the project work, and should take on a role similar to that of a research student in the School. Support will be offered by the academic staff member(s) supervising the project and sometimes also by other members of a research team. Many projects will be carried out in one of the astronomy computing clusters, but other arrangements are possible. The review essay that precedes experimental work is worth 10 credits, ie should have about 100 hours of work invested in it. This work is expected to be directly useful to the subsequent studies.</p>			
<b>Programme module type:</b>	Compulsory for Astrophysics MPhys		
<b>Pre-requisite(s):</b>	PH2011, PH2012, (PH3081 or PH3082 or (MT2003 or (MT2506 and MT2507), AS3013, AS4012, Entry to final year MPhys Astronomy		
<b>Anti-requisite(s):</b>	AS4103, PH4111, PH5101, PH5102		
<b>Learning and teaching methods and delivery:</b>	<p><b>Weekly contact:</b> Project students work "full-time" on their MPhys project through semester 2. All students must meet weekly with their project supervisor and attend fortnightly meetings with their peer-support group. Most projects are based in astronomy computer clusters in the School, where students can benefit from peer support and informal interaction with academic supervisor and other members of research teams. It is expected that the 40 hours a week will be primarily in this environment.</p>		
	<b>Scheduled learning:</b> 300 hours	<b>Guided independent study:</b> 300 hours	
<b>Assessment pattern:</b>	<p><b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%</p>		
	<p><b>As used by St Andrews:</b> Coursework = 100%</p>		
<b>Module Co-ordinator:</b>	Dr J Greaves		
<b>Lecturer(s)/Tutor(s):</b>	Astronomy staff		

## Physics (PH) modules

PH3007 Electromagnetism				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon Mon, Wed, Fri			
The properties of electromagnetic fields will be explored using a variety of mathematical tools (in particular, vector and differential calculus). Topics will include: charge and current distributions, electro- and magnetostatics, materials, electrodynamics, conservation principles, electromagnetic waves and radiation. This module builds on knowledge and skills acquired in prior coursework by developing techniques for solving more advanced problems in electromagnetism.				
<b>Programme module type:</b>	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Physics and Chemistry, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	(PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]) and PH2012 and [MT2001 or (MT2501 and MT2503)].			
<b>Required for:</b>	PH4025, PH4027, PH5005, PH5018, PH5021			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C Baily			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Baily			

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PH3012 Thermal and Statistical Physics			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	9.00 am even Mon, Tue, Thu, 3.00 pm odd Fri		
<p>The aim of this module is to cover at honours level the principles and most important applications of thermodynamics and statistical mechanics.</p> <p>The syllabus includes: equilibrium; the equation of state; the classical perfect gas; discussion of experimental results that lead to the three laws of thermodynamics; idealised reversible engines; the Clausius inequality; the classical concept of entropy and its connection to equilibrium; thermodynamic potentials; Maxwell's relations; open systems and the chemical potential; phase transitions and the Clausius-Clapeyron equation for first order transitions; higher order phase transitions; the connection between statistical physics and thermodynamics; the Boltzmann form for the entropy; microstates and macrostates; the statistics of distinguishable particles; the Boltzmann distribution; the partition function; statistical definition of the entropy and Helmholtz free energy; statistical mechanics of two-level systems; energy levels and degeneracy; quantum statistics: Bose-Einstein and Fermi-Dirac distributions; density of states; black-body radiation; Bose-Einstein condensation; Fermi energy; quantum gases and the classical limit; Maxwell-Boltzmann distribution; equipartition of energy; negative temperatures.</p>			
<b>Programme module type:</b>	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
<b>Pre-requisite(s):</b>	PH2011, PH2012, [MT2001 or (MT2501 and MT2503)], (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])		
<b>Required for:</b>	PH4025, PH5014		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%		
<b>Module Co-ordinator:</b>	Prof S Lee		
<b>Lecturer(s)/Tutor(s):</b>	Prof S Lee, Dr I Leonhardt		

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<b>PH3014 Transferable Skills for Physicists</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Not automatically available to General Degree students.			
<b>Planned timetable:</b>	10.00 am Wed, occasional 10.00 am Fri			
The aim of the module is to develop the key skills of oral and written communication, information technology, team working and problem solving. This will be done in the context of physics and astronomy, thus extending student knowledge and understanding of their chosen subject. Guidance, practice and assessment will be provided in the preparation and delivery of talks, critical reading of the literature, scientific writing, developing and writing a case for resources to be expended to investigate a particular area of science, tackling case studies.				
<b>Programme module type:</b>	Compulsory for Astrophysics, Physics, Theoretical Physics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), Entry to the School's Honours programme.			
<b>Anti-requisite(s):</b>	PH4040			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Through the year there are 8 lectures, 7 tutorials, 2 workshops, and about 14 hours of presenting and/or critically evaluating talks.			
	<b>Scheduled learning:</b> 29 hours		<b>Guided independent study:</b> 121 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework on basis of exercises = 100%			
<b>Module Co-ordinator:</b>	Dr B D Sinclair			
<b>Lecturer(s)/Tutor(s):</b>	Dr B D Sinclair and others			

<b>PH3061 Quantum Mechanics 1</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Tue, Thu			
This module introduces the main features of quantum mechanics. The syllabus includes: early ideas on quantisation, the emergence of the Schrödinger equation, the interpretation of the wave function and Heisenberg's uncertainty relation. The concepts of eigenfunctions and eigenvalues. Simple one-dimensional problems including potential wells and barriers; the linear harmonic oscillator. Solution of the Schrödinger equation for central forces, the radial Schrödinger equation, and the hydrogen atom.				
<b>Programme module type:</b>	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503)	<b>Co-requisite(s):</b>	PH3081 or PH3082 or prior [MT2003 or (MT2506 and MT2507)]	
<b>Required for:</b>	PH3062, PH4021, PH4022, PH4025, PH4028, PH4037, PH4040, PH5002, PH5003, PH5004, PH5005, PH5012, PH5014, PH5015, PH5021			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures and fortnightly tutorials.			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 74 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Dr A Kohnle			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Kohnle			

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PH3062 Quantum Mechanics 2				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am Wed, Fri			
This module explores more of the main features of quantum mechanics, taking for granted a knowledge of the material in PH3061. The syllabus includes a treatment of perturbation theory, and time dependence of the wave function including transitions between stationary states. Students are introduced to the quantum mechanics of a system of particles, which leads on to the distinction between fermions and bosons and applications to atoms, metals and neutron stars.				
<b>Programme module type:</b>	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH3061, (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
<b>Required for:</b>	PH4021, PH4022, PH4028, PH4037, PH4040, PH5002, PH5003, PH5004, PH5005, PH5012, PH5014, PH5015			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures and some tutorials.			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 74 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Dr A Kohnle			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Kohnle			

PH3074 Electronics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Mon, Wed, Fri, 10.00 am Fri lab			
This module gives a basic grounding in practical electronics. It introduces and develops the basic principles underlying the synthesis and analysis of digital and analogue circuits. The module is divided into three parts: an introductory section which reviews those parts of electromagnetism most related to electronics, including d.c. and a.c. circuit theory; a section on transistors and amplifiers including simple transistor circuits and noise considerations; and a section on digital electronics including logic gates, flip-flops and the design of circuits with applications to counters, latches registers etc.				
<b>Programme module type:</b>	Compulsory for Physics MPhys Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures, tutorials or short lab sessions			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr P Cruickshank			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Cruickshank			



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<b>PH3080 Computational Physics</b>			
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	3.00 pm Mon and 3.5 hours on 1 afternoon of Tue, Thu, Fri		
<p>This module is designed to develop a level of competence in Mathematica, a modern programming language currently used in many physics research labs for mathematical modelling. No prior experience is required. The module starts with a grounding in the use of Mathematica and discusses symbolic solutions and numerical methods. The main focus will be the use of Mathematica for problem solving in physics. The module is continually assessed through short tests and assignments, with the bulk of the assessment based on the submission of a Mathematica project.</p>			
<b>Programme module type:</b>	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics This or one of the computational maths modules is compulsory for the joint degrees with Mathematics.		
<b>Pre-requisite(s):</b>	PH2001, PH2012, MT2001 or (MT2501 and MT2503)	<b>Anti-requisite(s):</b>	PH3082
<b>Required for:</b>	This or PH3082 or similar is recommended for all physics and astronomy level 4 and 5 modules		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 2 - 2.5-hour sessions 1 week followed by 1 x 2 - 2.5-hour session the following week. This pattern alternates over the semester.		
	<b>Scheduled learning:</b> 44 hours	<b>Guided independent study:</b> 56 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr M Mazilu		
<b>Lecturer(s)/Tutor(s):</b>	Dr M Mazilu, Dr A Gillies, Dr G Smith		

Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH3081 Mathematics for Physicists			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	10.00 am even Mon, Tue, Thu, 2.00 pm odd Mon		
<p>The module aims to develop mathematical techniques that are required by a professional physicist or astronomer. There is particular emphasis on the special functions which arise as solutions of differential equations which occur frequently in physics, and on vector calculus. Analytic mathematical skills are complemented by the development of computer-based solutions. The emphasis throughout is on obtaining solutions to problems in physics and its applications. Specific topics to be covered will be Fourier transforms, the gamma function, the Dirac delta function, partial differential equations and their solution by separation of variables technique, series solution of second order ODEs, Hermite polynomials, Legendre polynomials and spherical harmonics. The vector calculus section covers the basic definitions of the grad, div, curl and Laplacian operators, their application to physics, and the form which they take in particular coordinate systems.</p>			
<b>Programme module type:</b>	Compulsory for Astrophysics, Single and Joint Physics, Theoretical Physics PH3081 is compulsory for Physics and Mathematics, Theoretical Physics and Mathematics if MT2003 is not taken in Second Year		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503)	<b>Anti-requisite(s):</b>	PH3082
<b>Required for:</b>	All PH and AS level 4 and 5 modules, and second semester level 3 modules, unless other pre-requisite(s) (eg PH3082) taken.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures plus tutorials.		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework (Class Tests) = 20%		
<b>Module Co-ordinator:</b>	Dr C Hooley		
<b>Lecturer(s)/Tutor(s):</b>	Dr C Hooley		

**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>PH3082 Mathematics for Chemistry / Physics</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to Chemistry and Physics MSci students			
<b>Planned timetable:</b>	10.00 am odd Mon, Tue, Thu, 2.00 pm odd Mon, 3.00 pm Mon, and one afternoon 2.00-5.30 pm of Tue, Thu, Fri			
<p>This module consists of the content and assessment of all of PH3081 and the first part of PH3080. The module aims to develop mathematical techniques that are required by a professional physicist or astronomer. There is particular emphasis on the special functions which arise as solutions of differential equations which occur frequently in physics, and on vector calculus. Analytic mathematical skills are complemented by the development of computer-based solutions. The emphasis throughout is on obtaining solutions to problems in physics and its applications. Specific topics to be covered will be Fourier transforms, the gamma function, the Dirac delta function, partial differential equations and their solution by separation of variables technique, series solution of second order ODEs, Hermite polynomials, Legendre polynomials and spherical harmonics. The vector calculus section covers the basic definitions of the grad, div, curl and Laplacian operators, their application to physics, and the form which they take in particular coordinate systems. In the other section of the module students are introduced to the Mathematica package, and shown how this can be used to set up mathematical models of physical systems.</p>				
<b>Programme module type:</b>	Compulsory for Chemistry and Physics MSci			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), entry to MSci Chemistry and Physics degree programme	<b>Anti-requisite(s):</b>	PH3066, PH3080, PH3081	
<b>Required for:</b>	All PH and AS level 4 and 5 modules, and second semester level 3 modules, unless other related taken (eg PH3080 and PH3081) taken.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Overlap with PH3081 is 3 lectures a week plus 0.5 tutorials a week. Overlap with PH3082 is in total 4 hours lectures, 18 hours supported computing lab sessions, and 3 hours test			
	<b>Scheduled learning:</b> 63 hours		<b>Guided independent study:</b> 137 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr C Hooley			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Hooley, Dr M Mazilu, Dr A Gillies, Dr G Smith			

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH3101 Physics Laboratory 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	2.00 pm - 5.30 pm Mon and 2.00 pm - 5.30 pm Thu			
The aims of the module are (i) to familiarise students with a wide variety of experimental techniques and equipment, and (ii) to instill an appreciation of the significance of experiments and their results. The module consists of sub-modules on subjects such as solid state physics, lasers, interfacing, and signal processing and related topics.				
<b>Programme module type:</b>	Compulsory for Physics BSc and MPhys, Chemistry and Physics MSci Optional for Astrophysics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503)	<b>Required for:</b>	PH4111 (unless PH4105 is taken), PH5101	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 3.5-hour laboratories.			
	<b>Scheduled learning:</b> 72 hours		<b>Guided independent study:</b> 78 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Rae			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Rae and others			

PH4022 Nuclear and Particle Physics				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Wed and Fri			
The aim of this module is to describe in terms of appropriate models, the structure and properties of the atomic nucleus, the classification of fundamental particles and the means by which they interact. The syllabus includes: nuclear sizes, binding energy, spin dependence of the strong nuclear force; radioactivity, the semi-empirical mass formula; nuclear stability, the shell model, magic numbers; spin-orbit coupling; energetics of beta-decay, alpha-decay and spontaneous fission; nuclear reactions, resonances; fission; electroweak and colour interactions, classification of particles as intermediate bosons, leptons or hadrons. Standard model of leptons and quarks, and ideas that go beyond the standard model.				
<b>Programme module type:</b>	Compulsory for Astrophysics, Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061 and PH3062			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures or tutorials.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 78 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 95%, Practical Examinations = 0%, Coursework = 5%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 95%, Coursework = 5%			
<b>Module Co-ordinator:</b>	Dr A Kohnle			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Kohnle			

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PH4025 Physics of Electronic Devices				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am even Mon, Tue, Thu, 3.00 pm odd Mon			
<p>The module describes the physical phenomena involved in the operation of semiconductor devices, and then shows how the phenomena determine the properties of specific devices such as the transistor. Although only a few devices are described, the student taking the module should acquire a sufficient background to understand a wide variety of modern semiconductor devices. The module covers: semiconductor properties: band gaps, optical and electrical properties; conduction in an electric field and by diffusion; factors determining the concentrations of electrons and holes; the continuity equation; properties of pn junctions and Schottky diodes; typical devices: bipolar transistor, field-effect transistor, MOSFET, light emitting diodes, semiconductor lasers.</p>				
<b>Programme module type:</b>	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3007, PH3012, PH3061			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr G Turnbull			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Turnbull, Dr L O'Faolain			

PH4026 Signals and Information				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am odd Mon, Wed, Fri, 2.00 pm even Mon			
<p>This module gives an introduction to what are signals and information, and how they are measured and processed. It also covers the importance of coherent techniques such as frequency modulation and demodulation and phase sensitive detection. The first part of the module concentrates on information theory and the basics of measurement, with examples. Coherent signal processing is then discussed, including modulation/demodulation, frequency mixing and digital modulation. Data compression and reduction ideas are illustrated with real examples and multiplexing techniques are introduced. The module concludes with a discussion of basic antenna principles, link gain, and applications to radar.</p>				
<b>Programme module type:</b>	Optional for Astrophysics, Physics, Theoretical Physics (Single and Joint)			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr P Cruickshank			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Cruickshank			

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PH4027 Optoelectronics and Nonlinear Optics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Tue, Thu, 3.00 pm Fri			
<p>The module provides an introduction to the basic physics underpinning optoelectronics and nonlinear optics, and a perspective on contemporary developments in the two fields. The syllabus includes: an overview of optoelectronic devices and systems; optical modulators; acousto-optics; Bragg and Raman-Nath; propagation of light in anisotropic media; electro-optics; waveguide and fibre optics; modes of planar guides; nonlinear optics; active and passive processes in second and third order; second harmonic generation; phase matching; coupled wave equations; parametric oscillators; self-focusing and self-phase-modulation; optical bistability; phase conjugation; solitons; Rayleigh; Raman and Brillouin scattering.</p>				
<b>Programme module type:</b>	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics Undergraduate Programmes.			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3007			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof I D W Samuel			
<b>Lecturer(s)/Tutor(s):</b>	Prof I D W Samuel, Dr M Mazilu			

PH4028 Advanced Quantum Mechanics				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon Tue and Thu			
<p>This module builds on the material of PH3061 and PH3062 Quantum Mechanics 1 and 2 to present some of the important current and advanced topics in quantum mechanics. Matrix mechanics is introduced as it is a convenient formalism in the applications of operator methods. These ideas are then used to cover the density matrix formalism as the general state description. Quantum degenerate gases will be discussed, including Bose-Einstein condensates and degenerate fermionic gases. Quantum information concepts will be covered, including concepts such as quantum entanglement, qubits, quantum teleportation, and quantum key distribution.</p>				
<b>Programme module type:</b>	Compulsory for Theoretical Physics Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH3061, PH3062, PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures and some tutorials.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 78 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr B Lovett			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Lovett			

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH4031 Fluids				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am even Mon, Tue, Thu, 2.00 pm odd Mon			
<p>This module provides an introduction to fluid dynamics, and addresses the underlying physics behind many everyday flows that we see around us. It starts from a derivation of the equations of hydrodynamics and introduces the concept of vorticity and the essentials of vorticity dynamics. The influence of viscosity and the formation of boundary layers is described with some straightforward examples. The effect of the compressibility of a fluid is introduced and applied to shock formation and to the conservation relations that describe flows through shocks. A simple treatment of waves and instabilities then allows a comparison between theory and readily-observed structures in clouds, rivers and shorelines.</p>				
<b>Programme module type:</b>	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics Two of PH4031, AS4011, AS4012, AS4025, AS4015 compulsory for Astrophysics BSc Two of PH4031, AS4025, AS4015 compulsory for Astrophysics MPhys			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
<b>Required for:</b>	AS5002 (strongly recommended, though not required)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures and some tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof M Jardine			
<b>Lecturer(s)/Tutor(s):</b>	Prof M Jardine			

PH4032 Special Relativity and Fields				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	3.00 pm Tue, 4.00 pm Tue, Fri			
<p>The module analyses classical fields in physics such as the electromagnetic field. Fields are natural ingredients of relativity, because they serve to communicate forces with a finite velocity (the speed of light). The module covers the tensor formalism of special relativity, relativistic dynamics, the Lorentz force, Maxwell's equations, retarded potentials, symmetries and conservation laws, and concludes with an outlook to general relativity.</p>				
<b>Programme module type:</b>	Compulsory for Theoretical Physics, Theoretical Physics and Mathematics Optional for Astrophysics, Physics, Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH3081, PH4038			
<b>Required for:</b>	PH5011 (recommended, though not required)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework (assessed tutorial questions) = 25%			
<b>Module Co-ordinator:</b>	Dr N Korolkova			
<b>Lecturer(s)/Tutor(s):</b>	Dr N Korolkova			

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PH4034 Laser Physics 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am Mon, 12.00 noon Wed, Fri			
This module presents a basic description of the main physical concepts upon which an understanding of laser materials, operations and applications can be based. The syllabus includes: basic concepts of energy-level manifolds in gain media, particularly in respect of population inversion and saturation effects; conditions for oscillator stability in laser resonator configurations and transverse and longitudinal cavity mode descriptions; single longitudinal mode operation for spectral purity and phase locking of longitudinal modes for the generation of periodic sequences of intense ultrashort pulses (i.e. laser modelocking); illustrations of line-narrowed and modelocked lasers and the origin and exploitability of intensity-induced nonlinear optical effects.				
<b>Programme module type:</b>	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
<b>Required for:</b>	PH5016 (unless PH4035 is taken), PH5018 - also recommended for PH5005			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 90%, Coursework = 10%			
<b>Module Co-ordinator:</b>	Dr F Koenig			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Koenig			

PH4035 Principles of Optics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	12.00 noon Mon, Wed, Fri			
This module formulates the main aspects of physics used in modern optics, lasers and optoelectronic systems. Topics covered include: polarised light and its manipulation, with descriptions in terms of Jones' vectors and matrices; Fresnel's equations for transmittance and reflectance at plane dielectric interfaces; reflection and transmission of multi-layer thin films plus their use in interference filters; interpretation of diffraction patterns in terms of Fourier theory; spatial filters; the theory and use of Fabry-Perot etalons; laser cavities and Gaussian beams.				
<b>Programme module type:</b>	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
<b>Required for:</b>	PH5016 (unless PH4034 is taken)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr F Koenig			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Koenig			



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<b>PH4036 Physics of Music</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	12.00 noon Mon, Tue, Thu			
Musical instruments function according to the laws of physics contained in the wave equation. Wind instruments, the human voice and the acoustics of concert halls can be explained largely by considering waves in the air, but understanding drums, percussion, string instruments and even the ear itself involves studying the coupling of waves in various media. The concepts of pitch, loudness and tone are all readily explained in quantitative terms as are the techniques that musicians and instrument makers use to control them. The analysis of musical instruments naturally culminates in a look at how musical sound may be synthesised.				
<b>Programme module type:</b>	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, [MT2001 or (MT2501 and MT2503)], Admission to an Honours programme in the School of Physics and Astronomy and prior or concurrent attendance at PH3081 or PH3082			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr J Kemp			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Kemp			

<b>PH4037 Physics of Atoms</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Tue, Thu			
This module provides a rational basis to the identification of atomic energy states and the various interactions of electrons within atoms. The syllabus includes: electron cloud model of an atom; electron spin and magnetic moment; spin-orbit interactions; one, two and many-electron systems; selection rules and line intensities for electric-dipole transitions; Lande g-factors; weak Zeeman and strong Paschen-Back magnetic field effects; hyperfine structure and Lamb shifts.				
<b>Programme module type:</b>	Compulsory for Physics, Astrophysics, Theoretical Physics, Chemistry and Physics MSci Optional for Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, [MT2001 or (MT2501 and MT2503)], PH3061, PH3062			
<b>Anti-requisite(s):</b>	PH4021			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures or tutorials.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 78 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr N Korolkova			
<b>Lecturer(s)/Tutor(s):</b>	Dr N Korolkova, Prof P Wahl, Dr Bruce			

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PH4038 Lagrangian and Hamiltonian Dynamics			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Planned timetable:</b>	10.00 am odd Mon, Tue, Thu, 2.00 pm even Fri		
The module covers the foundations of classical mechanics as well as a number of applications in various areas. Starting from the principle of least action, the Lagrangian and Hamiltonian formulations of mechanics are introduced. The module explains the connection between symmetries and conservation laws and shows bridges between classical and quantum mechanics. Applications include the central force problem (orbits and scattering) and coupled oscillators.			
<b>Programme module type:</b>	Compulsory for Astrophysics MPhys, Physics MPhys, Theoretical Physics Optional for Astrophysics BSc, Chemistry and Physics MSci, Physics BSc, Physics and Mathematics One of PH4038 and MT4507 compulsory for Theoretical Physics and Mathematics		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])		
<b>Anti-requisite(s):</b>	MT4507, PH3073		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 or 3 lectures and some tutorials		
	<b>Scheduled learning:</b> 26 hours	<b>Guided independent study:</b> 124 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%		
<b>Module Co-ordinator:</b>	Dr B Braunecker		
<b>Lecturer(s)/Tutor(s):</b>	Dr B Braunecker		

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<b>PH4039 Solid State Physics</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am Wed, Fri, 2.00 pm Fri.			
<p>This module is intended to show how the various optical, thermal and electrical properties of solids are related to the nature and arrangement of the constituent atoms in a solid. For simplicity, emphasis is given to crystalline solids. The module examines: symmetry properties of crystals; common crystalline structures; the behaviour of waves in crystals; waves of atomic motion, leading to thermal properties; electronic energy states: conductors, insulators, semiconductors; electrical properties arising from the wave nature of electrons; examples of the fundamental theory to typical solids such as simple metals, silicon and other semiconductors, and magnetic materials.</p>				
<b>Programme module type:</b>	Compulsory for Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]). PH3012 or CH3717, PH3061 or CH3712			
<b>Anti-requisite(s):</b>	PH3002	<b>Co-requisite(s):</b>	PH3061 unless taken previously	
<b>Required for:</b>	PH5014 (unless PH3002 was taken under previous requirements)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials			
	<b>Scheduled learning:</b> 34 hours		<b>Guided independent study:</b> 116 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Prof S Lee			
<b>Lecturer(s)/Tutor(s):</b>	Prof S Lee			

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PH4040 Nuclear and Particle Physics (Extended)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students on the Physics and Logic and Philosophy of Science, and Physics and Computer Science programmes.			
<b>Planned timetable:</b>	9.00 am Wed and Fri, 10.00 am Wed, occasional 10 am Fri			
<p>The first aim of this module is to describe in terms of appropriate models, the structure and properties of the atomic nucleus, the classification of fundamental particles and the means by which they interact. The syllabus includes: nuclear sizes, binding energy, spin dependence of the strong nuclear force; radioactivity, the semi-empirical mass formula; nuclear stability, the shell model, magic numbers; spin-orbit coupling; energetics of betadecay, alpha-decay and spontaneous fission; nuclear reactions, resonances; fission; electroweak and colour interactions, classification of particles as intermediate bosons, leptons or hadrons. Standard model of leptons and quarks, and ideas that go beyond the standard model. The second aim of this module is to develop research skills, and oral and written communication skills in science. Participants will be given training in the use of bibliographic databases, use of the scientific literature, oral and written communication skills, and will develop these skills through structured assignments.</p>				
<b>Programme module type:</b>	Compulsory for Physics and Logic and Philosophy of Science, and Physics and Computer Science			
<b>Pre-requisite(s):</b>	PH3061, PH3062, Entry to BSc Honours in either Logic and Philosophy of Science and Physics or Computer Science and Physics			
<b>Anti-requisite(s):</b>	PH4022, PH3014			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x lectures (x 11 weeks) plus 6 further lectures, 4 tutorials, 1 workshop and 2 hours of giving and evaluating tasks.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr A Kohnle			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Kohnle, Dr B D Sinclair, and others			

PH4105 Physics Laboratory 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm - 5.30 pm Mon and 2.00 pm - 5.30 pm Thu			
<p>The aims of the module are (i) to familiarise students with a wide variety of experimental techniques and equipment, and (ii) to instil an appreciation of the significance of experiments and their results. The module consists of sub-modules on topics such as solid state physics, optics, interfacing, and signal processing.</p>				
<b>Programme module type:</b>	Compulsory for Physics Optional for Astrophysics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
<b>Required for:</b>	PH4111 (unless PH3101 is taken)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 x 3.5-hour laboratories.			
	<b>Scheduled learning:</b> 70 hours		<b>Guided independent study:</b> 80 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Rae			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Rae			

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<b>PH4111 Physics Project (BSc)</b>			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Normally only in the final year of a Physics BSc programme		
<b>Planned timetable:</b>	Half time in second semester, plus some preparation in first semester.		
<p>The project aims to develop students' skills in searching the physics literature and in experimental design, the evaluation and interpretation of data, and in the presentation of results. The main project is preceded by a review essay on a topic which is usually related to the theme of the project. There is no specific syllabus for this module. Students taking the BSc degree select a project from a list offered, and are supervised by a member of staff. Project choice and some preparatory work is undertaken in semester one, but normally most of the 30 credits' worth of work is undertaken in semester two.</p> <p>The aim is that students provide the intellectual drive for the project work, and should take on a role similar to that of a research student in the School. Support will be offered by the academic staff member(s) supervising the project and usually also by other members of a research team. Many projects will be carried out in the School's research labs, but other arrangements are possible. The review essay that precedes experimental work is worth 10 credits, ie should have about 100 hours of work invested in it. This work is expected to be directly useful to the subsequent experimental studies.</p>			
<b>Programme module type:</b>	Compulsory for Single Honours Physics BSc, this or the other subject's project module for Joint Honours BSc Physics and Logic and Philosophy of Science, Physics and Computer Science,		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]). At least one of PH3101, PH4105		
<b>Anti-requisite(s):</b>	AS4103, AS5101, PH5101, PH5102		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Project students work "half-time" on their project through semester 2. All students must meet weekly with their project supervisor and attend fortnightly meetings with their peer-support group. Most projects are based in research labs in the School, where members of research teams will provide supervision ranging from safety cover to assistance with equipment and discussion of interpretation of results – it is expected that the 20 hours a week will be primarily in this environment.		
	<b>Scheduled learning:</b> 140 hours	<b>Guided independent study:</b> 160 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework (Review essay, Report and Oral Examination) = 100%		
<b>Module Co-ordinator:</b>	Dr P King		
<b>Lecturer(s)/Tutor(s):</b>	School staff		

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PH5002 Foundations of Quantum Mechanics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	2.00 pm Mon, Tue, Fri			
This module consists of seven parts: (i) classical and quantum systems; (ii) vector spaces, Hilbert spaces, operators and probability; (iii) basic postulates of quantum mechanics for observables with discrete spectra; (iv) illustrative examples; (v) treatment of continuous observables in terms of probability distribution functions and the spectral functions; (vi) quantum theory of orbital and spin angular momenta, Pauli-Schrodinger equation and its applications; (vii) introduction to relativistic quantum mechanics.				
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Chemistry and Physics, Theoretical Physics, Theoretical Physics and Mathematics.			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]) PH3061 and PH3062			
<b>Required for:</b>	Recommended, but not required, for PH5004			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr K Wan			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Wan			

PH5003 Group Theory				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	12.00 noon Wed, Fri, 3.00 pm Mon			
This module explores the concept of a group, including groups of coordinate transformations in three-dimensional Euclidean space; the invariance group of the Hamiltonian operator; the structure of groups: subgroups, classes, cosets, factor groups, isomorphisms and homomorphisms, direct product groups; introduction to Lie groups, including notions of connectness, compactness, and invariant integration; representation theory of groups, including similarity transformations, unitary representations, irreducible representations, characters, direct product representations, and the Wigner-Eckart theorem; applications to quantum mechanics, including calculation of energy eigenvalues and selection rules.				
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Chemistry and Physics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061 and PH3062.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof J Cornwell			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Cornwell			

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<b>PH5004 Quantum Field Theory</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	2.00 pm Thu, 3.00 pm Tue, Fri			
This module presents an introductory account of the ideas of quantum field theory and of simple applications thereof, including quantization of classical field theories, second quantization of bosons and fermions, the failure of single particle interpretation of relativistic quantum mechanics, solving simple models using second quantization, Feynman's path integral approach to quantum mechanics and its relation to classical action principles, field integrals for bosons and fermions, the relationship between path integral methods and second quantization.				
<b>Programme module type:</b>	Compulsory for Theoretical Physics Optional for Astrophysics MPhys, Physics MPhys, Chemistry and Physics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3012, PH3061, PH3062 and PH4038 or MT4507.			
<b>Co-requisite(s):</b>	At least one of PH5002 and PH5012 is recommended but not compulsory.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 90%, Coursework = 10%			
<b>Module Co-ordinator:</b>	Dr J Keeling			
<b>Lecturer(s)/Tutor(s):</b>	Dr J Keeling			

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PH5005 Laser Physics 2			
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School		
<b>Planned timetable:</b>	10.00 am Mon, Tue, Wed, Thu		
Quantitative treatment of laser physics embracing both classical and semiclassical approaches; transient/dynamic behaviour of laser oscillators including relaxation oscillations, amplitude and phase modulation, frequency switching, Q-switching, cavity dumping and mode locking; design analysis of optically-pumped solid state lasers; laser amplifiers including continuous-wave, pulsed and regenerative amplification; dispersion and gain in a laser oscillator - role of the macroscopic polarisation; unstable optical resonators, geometric and diffraction treatments; quantum mechanical description of the gain medium; coherent processes including Rabi oscillations; semiclassical treatment of the laser; tunable lasers.			
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics Optional for taught Postgraduate programmes in the School.		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3007, PH3061 and PH3062. PH4034 is recommended		
<b>Anti-requisite(s):</b>	PH5018, PH5180		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 4 lectures or tutorials.		
	<b>Scheduled learning:</b> 44 hours	<b>Guided independent study:</b> 106 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> 2.5-hour (open notes) Examination = 100%		
<b>Module Co-ordinator:</b>	Dr B Sinclair		
<b>Lecturer(s)/Tutor(s):</b>	Prof M Dunn, Dr L O'Faolain, Dr B Sinclair		



## Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH5011 General Relativity				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	9.00 am Wed, Fri, 3.00 pm Thu			
This module covers: inertial frames, gravity, principle of equivalence, curvature of spacetime; basic techniques of tensor analysis; Riemannian spaces, metric tensor, raising and lowering of indices, Christoffel symbols, locally flat coordinates, covariant derivatives, geodesics, curvature tensor, Ricci tensor, Einstein tensor; fundamental postulates of general relativity: spacetime, geodesics, field equations, laws of physics in curved spacetime; distances, time intervals, speeds; reduction of equations of general relativity to Newtonian gravitational equations; Schwarzschild exterior solution, planetary motion, bending of light rays, time delays; observational tests of general relativity; Schwarzschild interior solution, gravitational collapse, black holes.				
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH3066 or PH3081 or PH3082, PH3075 or PH3081 or PH3082 or [MT2003 or MT2506 and MT2507]), Recommended (PH3073 or PH4038) and PH4032.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr H Zhao			
<b>Lecturer(s)/Tutor(s):</b>	Dr H Zhao			

PH5012 Quantum Optics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	11.00 am Mon, Tue, Thu			
Quantum optics is the theory of light that unifies wave and particle optics. Quantum optics describes modern high-precision experiments that often probe the very fundamentals of quantum mechanics. The module introduces the quantisation of light, the concept of single light modes, the various quantum states of light and their description in phase space. The module considers the quantum effects of simple optical instruments and analyses two important fundamental experiments: quantum-state tomography and simultaneous measurements of position and momentum.				
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061, PH3062, PH4028.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures or tutorials.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr F Koenig			
<b>Lecturer(s)/Tutor(s):</b>	Dr F Koenig, Dr N Korolkova			

Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH5014 The Interacting Electron Problem in Solids			
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School		
<b>Planned timetable:</b>	4.00 pm Mon, Tue, Thu		
<p>The aim of this module is to give an overview of developments in modern condensed matter physics. The difficulties of a full quantum mechanical treatment of electrons with strong interactions will be discussed. Common existing approaches such as the Hubbard and t-J models and Fermi liquid theory will be compared. It will be shown that, although microscopic models can explain aspects of magnetism, they have little chance of capturing many other features of the fascinating low-energy physics of these systems. Instead, we introduce the principle of emergence, and show how it suggests radically new approaches to the problem of complexity in condensed matter physics and beyond. In this module, formal lectures will be combined with reading assignments, and the assessment will be based on marked homework together with an oral presentation followed by questions.</p>			
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3002 or PH4039, PH3012, PH3061, PH3062.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures and some tutorials.		
	<b>Scheduled learning:</b> 20 hours	<b>Guided independent study:</b> 130 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%		
	<b>As used by St Andrews:</b> Coursework = 50%, Presentation plus Oral Examination = 50%		
<b>Module Co-ordinator:</b>	Dr C Hooley		
<b>Lecturer(s)/Tutor(s):</b>	Dr C Hooley		

**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>PH5015 Applications of Quantum Physics</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	12.00 noon Mon, Tue, Thu			
<p>Quantum physics is one of the most powerful theories in physics yet is at odds with our understanding of reality. In this module we show how laboratories around the world can prepare single atomic particles, ensembles of atoms, light and solid state systems in appropriate quantum states and observe their behaviour. The module includes studies of laser cooling, Bose-Einstein condensation, quantum dots and quantum computing. An emphasis throughout will be on how such quantum systems may actually turn into practical devices in the future. The module will include assessment based on tutorial work and a short presentation on a research topic.</p>				
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061, PH3062			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 11 weeks) and a further 2 x 1-hour tutorials, 1 x 3-hour research lab visit, 3 hours student presentations during the semester.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Prof K Dholakia			
<b>Lecturer(s)/Tutor(s):</b>	Prof K Dholakia, Dr M Mazilu			

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH5016 Biophotonics				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Normally only taken in the final year of an MPhys or MSci programme involving the School			
<b>Planned timetable:</b>	9.00 am Mon, Wed, Fri			
The module will expose students to the exciting opportunities offered by applying photonics methods and technology to biomedical sensing and detection. A rudimentary biological background will be provided where needed. Topics include fluorescence microscopy and assays including time-resolved applications, optical tweezers for cell sorting and DNA manipulation, photodynamic therapy, lab-on-a-chip concepts and bio-MEMS. Two thirds of the module will be taught as lectures, including guest lectures by specialists, with the remaining third consisting of problem-solving exercises, such as writing a specific news piece on a research paper, assessed tutorial sheets and a presentation. A visit to a biomedical research laboratory using various photonics methods will also be arranged.				
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH4034 or PH4035, unless you are on a taught postgraduate programme			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures and some tutorials.			
	<b>Scheduled learning:</b> 24 hours		<b>Guided independent study:</b> 126 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%			
<b>Module Co-ordinator:</b>	Prof K Dholakia			
<b>Lecturer(s)/Tutor(s):</b>	Prof K Dholakia, Prof M C Gather, Dr Penedo			

PH5023 Monte Carlo Radiation Transport Techniques				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	2.00 pm Mon, Tue, Fri			
This module introduces the theory and practice behind Monte Carlo radiation transport codes for use in physics, astrophysics, atmospheric physics, and medical physics. Included in the module: recap of basic radiation transfer; techniques for sampling from probability distribution functions; a simple isotropic scattering code; computing the radiation field, pressure, temperature, and ionisation structure; programming skills required to write Monte Carlo codes; code speed-up techniques and parallel computing; three-dimensional codes. The module assessment will be 100% continuous assessment comprising homework questions and small projects where students will write their own and modify existing Monte Carlo codes.				
<b>Programme module type:</b>	Optional for Astronomy and Physics			
<b>Pre-requisite(s):</b>	PH2012: Physics 2B, Plus at least 1 of the following: AS3013: Computational Astrophysics, PH3080: Computational Physics, PH3081: Mathematics for Physicists, PH3082: Mathematics for Chemistry/Physics			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 hours of lectures (x 5 weeks), 1-hour tutorials (x 5 weeks)			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 130 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Wood			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Wood			

**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>PH5024 Surfaces, Symmetry, and Topology in Condensed Matter Physics</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to those in the final year of an MPhys programme			
<b>Planned timetable:</b>	10.00 am Tue, Wed, Thu			
<p>This module focuses on current topics in modern solid state physics, concentrating on the rich structural and electronic phases that can be stabilized at surfaces of materials. The first part will provide an overview of the distinct environment which surfaces provide, as well as detailing the experimental probes that can be used to investigate them. The second part of the module will introduce the concepts of topology in the context of electronic states in condensed matter systems. It will concentrate on topologically non-trivial states of matter, phases that are not characterised by spontaneous symmetry breaking but rather by a distinct topology of the underlying bulk electronic system, but with a particular focus on the implications for stabilizing exotic states at surfaces, and experimental probes of these. The module will employ continuous assessment for both formative and summative assessment, with an emphasis on developing skills in critical reading of scientific literature, presenting relevant works in class discussions and performing simple numerical calculations. Tutorial sessions will be used to provide constructive feedback on problem sheets throughout the course period. Full-class discussions in a "journal-club" style will aid in developing understanding of critical reading of research papers and complex topics, while written feedback on presentations will provide assessment of individual and group presentations delivered by students during the module.</p>				
<b>Programme module type:</b>	Optional for MPhys programmes			
<b>Pre-requisite(s):</b>	PH3061, PH3062, (PH3081 or PH3082 or content from relevant mathematics modules), PH3080, PH4039, (PH4021 or PH4037)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 hours of lectures (x 7 weeks), 1-hour tutorials (x 4 weeks), 3-hour presentations (x 3 weeks)			
	<b>Scheduled learning:</b> 34 hours		<b>Guided independent study:</b> 116 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 40%, Coursework = 60%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr P Wahl			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Wahl, Dr P King			

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH5101 Physics Project (MPhys)			
<b>SCOTCAT Credits:</b>	60	SCQF Level 11	<b>Semester:</b> Whole Year
<b>Availability restrictions:</b>	Normally Available only to those in the final year of an MPhys Physics or MSci Chemistry and Physics degree programme		
<b>Planned timetable:</b>	Full time in second semester, following some work in first.		
<p>The project aims to develop students' skills in searching the physics literature and in experimental design, the evaluation and interpretation of data, and in the presentation of results. The main project is preceded by a review essay on a topic which is normally related to the theme of the project. There is no specific syllabus for this module. Students taking the MPhys degree select a project from a list offered, and are supervised by a member of staff. Project choice and some preparatory work is undertaken in semester one, but normally most of the 60 credits' worth of work is undertaken in semester two.</p> <p>The aim is that students provide the intellectual drive for the project work, and should take on a role similar to that of a research student in the School. Support will be offered by the academic staff member(s) supervising the project and usually also by other members of a research team. Many projects will be carried out in the School's research labs, but other arrangements are possible. The review essay that precedes experimental work is worth 10 credits, ie should have about 100 hours of work invested in it. This work is expected to be directly useful to the subsequent experimental studies.</p>			
<b>Programme module type:</b>	Compulsory for Physics MPhys Either PH5101 or CH5441 is compulsory for Chemistry and Physics		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3101 or PH4105		
<b>Anti-requisite(s):</b>	AS4103, AS5101, PH4111, PH5102		
<b>Learning and teaching methods and delivery:</b>	<p><b>Weekly contact:</b> Project students work "full-time" on their MPhys project through semester 2. All students must meet weekly with their project supervisor and attend fortnightly meetings with their peer-support group. Most projects are based in research labs in the School, where members of research teams will provide supervision ranging from safety cover to assistance with equipment and discussion of interpretation of results – it is expected that the 40 hours a week will be primarily in this environment.</p>		
	<b>Scheduled learning:</b> 300 hours	<b>Guided independent study:</b> 300 hours	
<b>Assessment pattern:</b>	<p><b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%</p>		
	<p><b>As used by St Andrews:</b> Coursework (Review essay, Report, and Oral Examination) = 100%</p>		
<b>Module Co-ordinator:</b>	Dr P King		
<b>Lecturer(s)/Tutor(s):</b>	School staff		

**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>PH5103 Project in Theoretical Physics (60)</b>				
<b>SCOTCAT Credits:</b>	60	SCQF Level 11	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Normally available only to those in the final year of a Theoretical Physics or Mathematics and Theoretical Physics degree programme.			
<b>Planned timetable:</b>	Full time for second semester following some work in first			
<p>This project in theoretical physics research aims to develop students' skills in searching the physics literature, in the design and implementation of investigations in theoretical/computational physics, in the evaluation and interpretation of data, and in the presentation of results.</p> <p>The main project is preceded by a review essay on a topic which is normally related to the theme of the project. There is no specific syllabus for this module. Students taking the MPhys theoretical physics degree select a project from a list offered, and are supervised by a member of staff. Project choice and some preparatory work is undertaken in semester one, but normally most of the 60 credits' worth of work is undertaken in semester two. The aim is that students provide the intellectual drive for the project work, and should take on a role similar to that of a research student in the School. Support will be offered by the academic staff member(s) supervising the project. In addition to weekly meetings with the project supervisor, students will meet fortnightly with their peer support group.</p>				
<b>Programme module type:</b>	Compulsory for Theoretical Physics Either PH5103 or MT5999 is compulsory for Theoretical Physics and Mathematics			
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3062, PH3007, PH4022, PH4032. Some projects will need learning from specific modules - please contact potential supervisors.			
<b>Anti-requisite(s):</b>	PH5102, PH5101, PH4111, AS4103, AS5101			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Project students should spend all their time in semester 2 working on the project. All students must meet weekly with their project supervisor, and attend fortnightly meetings with their peer-support group. Most of their time will be spent working on theoretical physics in an independent fashion, though with the opportunity to discuss things with their supervisor face to face or electronically. In addition, all theoretical physics project students are encouraged to attend the fortnightly meeting theoretical physics research seminars.			
	<b>Scheduled learning:</b> 28 hours	<b>Guided independent study:</b> 572 hours		
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework (project reports, presentation, and oral examination) = 100%			
<b>Module Co-ordinator:</b>	Dr C Hooley			
<b>Lecturer(s)/Tutor(s):</b>	School Staff			

## Physics & Astronomy - Honours Level - 2014/15 - August 2014

PH5183 Photonics Applications			
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b> 1
<b>Availability restrictions:</b>	This module is intended for students in the final year of an MPhys or MSci programme involving the School, for those in the MSc in Photonics and Optoelectronic Devices MSc, and for those on the EngD degree in Photonics.		
<b>Planned timetable:</b>	9.00 am Mon, Wed, Fri, 11.00 am Wed, Fri, 12.00 noon Mon, Tue, Thu Depending on options taken		
<p>Students on this module choose to do two of the following three sections:</p> <p><b>Microphotonics and Plasmonics:</b> This covers the Bragg effect, multilayer mirrors, defects causing confined cavity states, periodicity leading to bandstructure, scaling of bandstructure in reduced frequency, Bloch modes and photonic bandgap. It then considers photonic crystal waveguides, photonic crystal fibres, and supercontinuum generation in photonic crystal fibres. Plasmonics is based on oscillations of the free electrons in a metallic material. Resonances of Plasmons are the basis for a new class of materials called 'Metamaterials'. These are compared with photonic crystals. Applications include super-resolution imaging, optical cloaking, sensing, and surface enhanced Raman scattering.</p> <p><b>Biophotonics:</b> This will introduce students to the exciting opportunities offered by applying photonics methods and technology to biomedical sensing and detection. A rudimentary biological background will be provided where needed. Topics include fluorescence microscopy and assays including time-resolved applications, optical tweezers for cell sorting and DNA manipulation, photodynamic therapy, lab-on-a-chip concepts and bio-MEMS.</p> <p><b>Optical Trapping and Atom Optics:</b> Quantum physics is one of the most powerful theories in physics yet is at odds with our understanding of reality. In this course we show how laboratories around the world can prepare single atomic particles, ensembles of atoms, light and solid state systems in appropriate quantum states and observe their behaviour. The material includes optical cooling and trapping of atoms and ions, Fermi gases, studies of Bose-Einstein condensation, and matter-wave interferometry.</p> <p>Students must not cover Biophotonics in both this module and PH5016/PH5264, and must not cover Optical Trapping and Atom Optics in both this module and PH5015/PH5267.</p>			
<b>Programme module type:</b>	Optional for Astrophysics MPhys, Physics and Mathematics BSc, Physics MPhys, Physics and Chemistry, Theoretical Physics MPhys		
<b>Pre-requisite(s):</b>	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 lectures and occasional tutorials.		
	<b>Scheduled learning:</b> 32 hours	<b>Guided independent study:</b> 118 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 80%, Coursework = 20%		
<b>Module Co-ordinator:</b>	Prof K Dholakia		
<b>Lecturer(s)/Tutor(s):</b>	Prof K Dholakia, Dr M Mazilu, Dr A Di Falco, Dr L O'Faolain, Dr Penedo		



**Physics & Astronomy - Honours Level - 2014/15 - August 2014**

<b>PH5265 EMSP Solar Power</b>				
<b>SCOTCAT Credits:</b>	6	SCQF Level 11	<b>Semester:</b>	1
<b>Planned timetable:</b>	Full time 23 and 24 October			
<p>This module will introduce students to the societal need and the economics of solar power, then enter into the fundamental limitations of solar cells, such as the Shockley limit for a single junction solar cell and how it is addressed using multifunction cells. This is followed by methods of characterising solar cells. The light-trapping problem will be discussed next and how it is addressed using photonic nanostructures (random scatterer, diffractive, plasmonic structures) and "black silicon". Finally, the students will be introduced to different solar cell materials and their specific requirements, e.g. organic semiconductors, organic/inorganic hybrids, dye-sensitised cells and more "exotic" materials such as CdTe and CIGS. The module includes 3 off 2h laboratory sessions reinforcing key solar cell concepts. Overall, the students will gain insight into key aspects of solar cell operation and be exposed to some of the current research trends.</p>				
<b>Programme module type:</b>	Optional for Physics MPhys			
<b>Pre-requisite(s):</b>	Admission to an MPhys/MSci programme within the School			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-day residential workshop + 1 afternoon of presentation.			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 42 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100% (tutorial sheets = 50%, project presentation = 50%)			
<b>Module Co-ordinator:</b>	Prof I Samuel			
<b>Lecturer(s)/Tutor(s):</b>	Prof I Samuel and others			



## School of Psychology & Neuroscience

General degree students wishing to enter 3000-level modules and non-graduating students wishing to enter 3000-level or 4000-level modules must consult with the relevant Honours Adviser within the School to confirm they are properly qualified to enter the module.

### Neuroscience (PN) Modules

PN3312 Pharmacology				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	Lectures: 11.00 am Mon, Tue and Wed Practicals: to be arranged.			
<p>This module assumes that students are familiar with the material covered in BL2101. The basic principles of pharmacology will be covered, including evidence to support the modern concept that drugs act via specific receptors present on target tissues and our present understanding of laws governing drug-receptor interactions. The concept of agonists, competitive and non-competitive antagonists and the interactions between such classes of drugs will be discussed. The effects of drugs upon the peripheral and central nervous systems and the cardiovascular system will be covered. How these drugs can be used to understand the function of these systems and to correct their malfunctioning in various disease states will be explained. The practical component will cover the principles of drug action and receptor theory and illustrate the use of bioassays in pharmacological investigations. These practical sessions aim to help students build a working knowledge of drug names and actions as well as pharmacological concepts.</p>				
<b>Programme module type:</b>	Compulsory for Neuroscience. Optional for Biochemistry, Biomolecular Science, Molecular Biology, Cell Biology, Biology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL2101 or BL2104	<b>Anti-requisite(s):</b>	BL3312	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures and tutorials: 27 hours in total, Usually 3 lectures or tutorials (x 11 weeks) Practicals: 3 x 1-hour and 1 x 2-hours during the semester.			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 165 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Doherty			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Butler, Dr G Doherty, Dr GB Miles, Dr G Prescott, Dr R Ramsay, Dr K Spencer, Dr P Kerry			

## Psychology & Neuroscience - Honours Level - 2014/15 - August 2014

PN3313 Neuroscience			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Planned timetable:</b>	Lectures: 12.00 am Mon, Tue and Wed Practicals: to be arranged.		
<p>This module covers biochemical, cellular and behavioural aspects of the nervous system in health and disease. It starts with the basic biochemistry of neural membrane proteins such as receptors and channels, and considers the cellular mechanisms of action potential generation and propagation, and synaptic transmission. The physiology of sensory perception is illustrated by examining the visual system, while motor control is considered in terms of vertebrate locomotion. Selected aspects of learning and memory processes are also examined. Students are given extensive hands-on experience of computer simulation as a learning tool in this course. The associated practical work illustrates the lecture course through experiments on the nerve impulse, and mechanisms of neuronal cell loss.</p>			
<b>Programme module type:</b>	Compulsory for Neuroscience. Optional for Behavioural Biology, Cell Biology, Evolutionary Biology, Zoology and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	BL2101	<b>Anti-requisite(s):</b>	BL3313
<b>Required for:</b>	PN4230, PN4231, BL4232, PN4234, PN4235		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 29 hours of lectures or tutorials in total, 2 x 3-hour practicals and 4 hours of labs during the semester.		
	<b>Scheduled learning:</b> 39 hours	<b>Guided independent study:</b> 161 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr G Miles		
<b>Lecturer(s)/Tutor(s):</b>	Prof F Gunn-Moore, Prof K Sillar, Dr G Miles, Dr W Heitler, Dr W Li, Dr G Doherty		

PN4230 Neurodegeneration and Aging			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module		
<b>Planned timetable:</b>	To be arranged.		
<p>In this module, students will develop a detailed understanding of molecular neuroscience. Work will focus at the biochemical and molecular level, so that detailed knowledge of signalling pathways will be gained. The module concentrates on three key areas relating to neurodegenerative processes. 1) How neurons stay alive 2) The aging nervous system: Changes that can 'prime' neurons for degeneration, degenerative disorders - risks, pathology, treatments. Including a practical session 3) How the nervous system responds to neurodegenerative diseases, with particular focus on Alzheimer's disease.</p>			
<b>Programme module type:</b>	Optional for Biochemistry, Cell Biology, Molecular Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.		
<b>Anti-requisite(s):</b>	BL4230		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Seminars: up to 2 hours per week (to a total of 18 hours) and 2 x 3-hour practicals during the semester.		
	<b>Scheduled learning:</b> 24 hours	<b>Guided independent study:</b> 126 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Dr G Doherty		
<b>Lecturer(s)/Tutor(s):</b>	Prof F Gunn-Moore, Dr G Doherty, Dr M Andrews		

PN4231 Neuromodulation				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module			
<b>Planned timetable:</b>	To be arranged.			
<p>Until recently the nervous system was viewed as a black and white world in which neuronal networks carried out tasks using fast chemical synaptic transmission to produce an appropriate network output. However the output of neuronal networks is not fixed but instead is modifiable under different behavioural or developmental circumstances. A major source of flexibility in the output neuronal networks derives from neuromodulation; a process in which the basic operation of the networks remains the same but the strengths of synaptic connections and the integrative electrical properties of neurons in the networks are changed by the actions of a range of neuromodulators. This module explores the diverse range of neuromodulatory mechanisms and outlines their importance in information processing in the nervous system.</p>				
<b>Programme module type:</b>	Optional for Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	PN3313	<b>Anti-requisite(s):</b>	BL4231	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars.			
	<b>Scheduled learning:</b> 24 hours		<b>Guided independent study:</b> 126 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 25%, Coursework = 25%			
	<b>As used by St Andrews:</b> 1-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr S Pulver			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Pulver, Dr G Miles, Dr W Heitler			

PN4234 Synaptic Transmission				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module			
<b>Planned timetable:</b>	To be arranged.			
<p>Extensive and versatile communication between nerve cells using special junctions called synapses endows the nervous system with many complex functions like learning and memory. This module will cover important recent progress in understanding the morphology and ultrastructure of synapses, neurotransmitter corelease and recycling mechanisms, retrograde signalling, synaptic plasticity, the role of glial cells and the development of neurotransmission. Some laboratory work will provide students with hands-on experience of advanced research methods.</p>				
<b>Programme module type:</b>	Optional for Behavioural Biology, Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	PN3313	<b>Anti-requisite(s):</b>	BL4234	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> A total of 6 x 1.5 hour seminars, 7 x 1 hour lectures and 2 x 3 hour practicals over 10 weeks			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr W Li			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Li, Prof K Sillar, Dr G Miles			

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PN4235 Motoneurons: From Physiology to Pathology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module			
<b>Planned timetable:</b>	To be arranged.			
This module aims to provide in depth knowledge of key aspects of neuronal function and potential dysfunction by focussing on one of the most studied and best characterised classes of neurons in the central nervous system, motoneurons. The module will cover topics such as: the history of motoneurons in neuroscience research; the genetics controlling motoneuron development, the intrinsic electrical properties of motoneurons; synaptic inputs received by motoneurons; motoneuron recruitment; and motoneuron disease.				
<b>Programme module type:</b>	Optional for Behavioural Biology, Cell Biology, Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	PN3313	<b>Anti-requisite(s):</b>	BL4235	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 10 hours of seminars, 6 hours of lectures and 6 hours of practical over the semester.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Miles			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Li, Prof K Sillar, Dr G Miles, Dr W Heitler			

PN4299 Neuroscience Research Project				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged with the supervisor.			
This project will involve extensive laboratory or field research to investigate a defined problem broadly within biology, psychology, or neuroscience appropriate to the degree programme being studied by each student. The project will involve diligence, initiative and independence in pursuing the literature, good experimental design, good experimental and/or analytical technique either in the field or the laboratory, and excellent record keeping. The project will culminate in the production of a high-quality report that demonstrates a deep understanding of the chosen area of research. Students will be allocated to a member of staff within the School of Psychology and Neuroscience or the School of Biology who will guide and advise them in research activities throughout the academic year.				
<b>Programme module type:</b>	PN4299 or BL4200 is compulsory for Neuroscience.			
<b>Anti-requisite(s):</b>	BL4200, BL4201, PS4050			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Meetings with supervisor			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 567 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr G H Doherty			
<b>Lecturer(s)/Tutor(s):</b>	Individual Supervisors across the School of Psychology and Neuroscience or the School of Biology			

Psychology (PS) modules

PS3021 Research Design and Analysis 1			
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Not available to General Degree Students.		
<b>Planned timetable:</b>	9.00 am - 11.00 am / 2:00 - 5:00 pm Mon		
This module is designed to provide a basic understanding of research design and statistics that will provide the foundations for independent empirical research and critical analysis required in the final year of the Honours programme. Emphasis will be placed on the acquisition of design and analysis skills and an understanding of the underlying philosophy that guides research. The syllabus will include core aspects such as ethical issues in research, basic statistics, technical writing and the use of statistical packages.			
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology degrees with BPS recognition, Psychology with Biology, Psychology with Film Studies. Compulsory for BPS Recognition. Optional for Joint Honours Psychology without BPS recognition.		
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or permission of the Psychology Honours Adviser		
<b>Required for:</b>	PS3022		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1.5-hour laboratory/tutorial class or seminar.		
	<b>Scheduled learning:</b> 39 hours	<b>Guided independent study:</b> 111 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%		
<b>Module Co-ordinator:</b>	Dr M W Oram		
<b>Lecturer(s)/Tutor(s):</b>	Dr M W Oram, Dr J Ales		

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PS3022 Research Design and Analysis 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Not available to General Degree Students.			
<b>Planned timetable:</b>	9.00 am - 11.00 am / 2:00 - 5:00 pm Mon			
This module is designed to provide a more advanced understanding of research design and statistics. Emphasis will be placed on the acquisition of analytical skills covering typical research situations encountered in the behavioural sciences. The syllabus will include advanced analysis of variance, multivariate statistics and non-parametric statistics, as well as training in computerised data analysis and presentation.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology degrees with BPS recognition, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory for BPS Recognition. Optional for Joint Honours Psychology without BPS recognition.			
<b>Pre-requisite(s):</b>	PS3021, Grades of 11 or better in PS2001 and PS2002 or permission of the Psychology Honours Adviser			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1.5-hour laboratory/tutorial class or seminar.			
	<b>Scheduled learning:</b> 39 hours		<b>Guided independent study:</b> 111 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr K Mavor			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Mavor, P Gardner, R Spence			

PS3031 Conceptual Issues and Theoretical Perspectives				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu (Weeks 1-5)			
This module addresses the historical and philosophical background to current debates in psychology. The module will be taught via lectures and seminars including student presentations. Emphasis will be placed on the development of critical analysis of alternative models and levels of explanations of behaviour, and the ability to relate conceptual debates in psychology to issues in the real world.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour laboratory class or seminar (Weeks 1 - 5).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 85 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Mr P L Gardner			
<b>Lecturer(s)/Tutor(s):</b>	Mr P L Gardner			



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<b>PS3032 Assessment in Clinical Psychology</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu (Weeks 7 - 11).			
This module presents psychopathological conditions and provides a basic understanding of the underlying neuronal and/or cognitive-behavioural mechanisms. Examples will be drawn from the field of clinical psychology and/or clinical neuropsychology. The module will further explore in detail the tools and procedures used to assess psychopathological conditions by discussing their theoretical/statistical background and by demonstrating how to use these tools in clinical and experimental settings.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour laboratory class or seminar (Weeks 7 - 11).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 85 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr D Balslev			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Balslev			

<b>PS3033 Developmental Psychology</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu (Weeks 1 - 5)			
This module is designed to equip students with an appreciation of key principles, concepts, methods and discoveries in developmental psychology, with an emphasis on evolutionary and comparative perspectives that are a particular strength of such work in St Andrews. The module aims to offer a broad perspective spanning infancy to childhood, and a range of key topics in cognitive and social development.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002		<b>Anti-requisite(s):</b>	PS3010 and PS3011
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1.5-hour laboratory class or seminar (Weeks 1 - 5).			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 82 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Seed			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Seed			

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PS3034 Social Psychology				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue (Weeks 1 - 5)			
This module explores in depth key topics across the breadth of social psychological enquiry. A variety of research approaches will be examined in order to develop the scientific understanding and critical skills in this field. Approaches that will be covered include social cognition, social identity and the study of intergroup relations. In each case, the strengths and limitations of the approaches are explored, and theoretical knowledge will be linked to current events.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1-hour laboratory class or seminar (Weeks 1 - 5)			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 85 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr N Tausch			
<b>Lecturer(s)/Tutor(s):</b>	Dr N Tausch			

PS3035 Cognitive and Behavioural Neuroscience				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue (Weeks 1 - 5).			
This module aims to provide an understanding of psychological knowledge in several inter-related domains concerned with the biological bases of behaviour. Emphasis will be laid on basic experimental science from analysis of molecular and synaptic events, single cell studies, brain activity scans, and clinical studies, and the relationship between cognitive, emotional, behavioural, neurological and physiological processes will be examined.				
<b>Programme module type:</b>	Compulsory for Neuroscience, Single Honours Psychology. Either PS3035 or PS3036 is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1.5-hour laboratory class or seminar (Weeks 1 - 5)			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 82 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr I Jentsch			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Jentsch			

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<b>PS3036 Evolutionary and Comparative Psychology</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue (Weeks 7 - 11)			
This module will address evolutionary and comparative approaches to psychology. The aim is to provide an understanding of major evolutionary forces and how they have shaped animal and human behaviour and psychology. Key principles, concepts and methodologies will be introduced and related to specific topic areas such as the evolution of social behaviour and the evolutionary origins of language and cognition.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology. Either PS3035 or PS3036 is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1.5-hour laboratory class or seminar (Weeks 7 - 11).			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 82 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr C Hobaiter			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Hobaiter			

<b>PS3037 Perception</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue (Weeks 7 - 11).			
The aim of this module is to develop an understanding of visual perception and its functions. Stress will be laid on the integration of findings from physiology, neuropsychology, anatomy, and psychophysics. Topic areas covered will include theories of human vision and their application to understanding our ability to perceive distinct visual properties, for example the shape, size, location and identity of objects. Emphasis will be placed on the development of the skill of critical evaluation of evidence and theory.				
<b>Programme module type:</b>	Compulsory for Neuroscience, Single Honours Psychology. Either PS3037 or PS3038 (normally PS3038) is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 1.5-hour laboratory class or seminar (Weeks 7 - 11).			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 82 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof J Harris			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Harris			

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PS3038 Cognition				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available to General Degree students with permission of the Psychology Honours Adviser			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu (Weeks 7 - 11).			
The aim of this module is to develop an understanding of human cognitive processes. Topic areas covered include, for example, attention, memory, reasoning, and decision making. Emphasis will be placed on the development of the skill of critical evaluation of evidence and theory. Lectures will be accompanied by practical classes, in which students will gain experience of the experimental methods used in cognitive research, and seminars in which research papers will be critically evaluated..				
<b>Programme module type:</b>	Compulsory for Neuroscience, Single Honours Psychology. Either PS3037 or PS3038 (normally PS3038) is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS2001 and PS2002			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 31-hour laboratory class or seminar (Weeks 7 - 11).			
	<b>Scheduled learning:</b> 15 hours		<b>Guided independent study:</b> 85 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr T Otto			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Otto			

PS4040 Psychology Review				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in a Psychology Honours Programme.			
<b>Planned timetable:</b>	Not applicable.			
This module will foster the abilities needed to search, collate and integrate an extensive area of psychological literature. Emphasis will be placed on analytical and methodological issues, and this module therefore complements PS3021 and PS3022. A systematic approach to the analysis of a specific body of literature will be encouraged. Students are invited to identify preferred subject matters so long as they fall within the area of the supervisor's expertise. Supervision will be given to aid students in the collation, planning and organisational phases of their work. The review will be limited to 5,000 words.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory for BPS Recognition.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Co-requisite(s):</b>	PS3021 and PS3022. This module is normally completed in the first year of the Honours Programme.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision by pre-assigned member of staff.			
	<b>Scheduled learning:</b> 10 hours		<b>Guided independent study:</b> 90 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Review = 100%			
<b>Module Co-ordinator:</b>	Dr R Sprengelmeyer			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Sprengelmeyer			

**Psychology & Neuroscience - Honours Level - 2014/15 - August 2014**

<b>PS4050 Psychology Project (30)</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	Not applicable.			
<p>The aim of the project is to develop and foster the skills of experimental design, appropriate research management and statistical analysis. A wide choice of topics is possible, but the skills developed in modules PS3021, PS3022 and PS4040 are an essential preparation. The empirical part of the project may be conducted with another student, to allow greater research scope and the choice of more realistic problems, but all analysis and report-writing must be carried out individually. Topics range over all areas of psychology under active investigation in the School, and effort is made to arrange for students to work in one of their preferred areas.</p>				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology with BPS recognition. BL4200 or BL4201 or PS4050 are compulsory for Neuroscience. BL4200 or PS4050 is compulsory for Psychology with Biology. Compulsory for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS4040, PS3021 and PS3022. Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Anti-requisite(s):</b>	PN4299, PS4299			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision by pre-assigned member of staff			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 270 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr R Sprengelmeyer			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Sprengelmeyer			

<b>PS4060 The Impact of Psychological Research Review</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
<p>In this module students will select a key psychological research paper to review (subject to approval by module controller). Students will then submit an outline for formative feedback. The review will be composed independently thereafter. The review should include historical antecedents, including theoretical and methodological issues related to the area and specific problem of issue that the paper addresses. The review should also include an evidence-based evaluation of the impact of the key paper on psychological science and on society. The module includes 6 one-hour sessions on practical skills required to complete the review.</p>				
<b>Programme module type:</b>	Compulsory for Single Honours Psychology. Optional for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience..			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Anti-requisite(s):</b>	BL4200			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 2-hour workshops in Semester 1			
	<b>Scheduled learning:</b> 6 hours		<b>Guided independent study:</b> 144 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Essay = 100%			
<b>Module Co-ordinator:</b>	Dr E M Bowman			
<b>Lecturer(s)/Tutor(s):</b>	TBC			

Psychology & Neuroscience - Honours Level - 2014/15 - August 2014

PS4065 Vision: from Neurons to Awareness			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Planned timetable:</b>	9.00 am - 11.00 am Fri		
<p>The aim of the module is to develop an advanced understanding of the psychological processes involved in visual perception. The module will illustrate how a full understanding of perception requires scientific study at a number of levels, from the whole human, moving apparently effortlessly through our complex and sometimes dangerous environment, through neuropsychological studies exploring what happens when selective damage occurs, to the functioning of the individual neurons that underlie our ability to perceive an apparently continuous, colourful, three-dimensional world.</p> <p>The module will cover selected topics that illustrate the extraordinary range of problems our perceptual systems solve in the real world, including: active vision (how do our visual systems allow us to function fast enough to drive a car, play fast-action sports), three-dimensional vision (why and how do we perceive the world as three-dimensional), material perception (how do we perceive things as dirty, smooth, shiny, patterned), visual consciousness (is perception necessarily conscious, and is it possible to explore consciousness scientifically?).</p>			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.		
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%		
<b>Module Co-ordinator:</b>	Prof J Harris		
<b>Lecturer(s)/Tutor(s):</b>	Prof J Harris		

**Psychology & Neuroscience - Honours Level - 2014/15 - August 2014**

<b>PS4071 Behavioural Neuroscience</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu			
<p>The overall aim of this module is to allow students access to current research in the area of behavioural neuroscience. Possible topics include motivation, learning and attention. Past themes explored in the module include: the relationship between 'normal' learning and addiction; the transition from goal-directed action to stimulus-response habit; the neural basis of compulsive gambling; the efficacy of biological treatments of addiction; and the behavioural and neural effects of MDMA ('ecstasy'). Results from both human and animal research will be considered in parallel, with examples of papers ranging from molecular neuroscience to neuropsychology. The format of the module will include lectures (which are designed to provide the students with the background necessary to read research articles); guided seminars and student presentations summarising research articles. In order to maximise the benefits of the students' presentations, each student will meet with the lecturer at least twice to discuss the topic and content of their talk.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr E M Bowman			
<b>Lecturer(s)/Tutor(s):</b>	Dr E M Bowman			

<b>PS4074 Cognitive Psychology and the Emotional Disorders</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Mon			
<p>This module is designed to demonstrate how theories from cognitive psychology can enhance our understanding of the emotional disorders. Teaching will be based on individual seminar presentations followed by class discussion. In the presentations students will be expected to review and critically evaluate original research. Seminars will focus on topics such as autobiographical memory and depression, autobiographical memory and anxiety, attentional bias in depression and anxiety, and interpretative biases in depression and anxiety. At the end of the seminar series, students should understand how depression and anxiety can be differentiated on the basis of these biases.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr B Dritschel			
<b>Lecturer(s)/Tutor(s):</b>	Dr B Dritschel			

Psychology & Neuroscience - Honours Level - 2014/15 - August 2014

PS4083 Psychology of Music				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon			
The aim of the module is to introduce students to psychological processes underlying music perception, cognition, and performance. The relationship between musical phenomena and mental functions will be illustrated. The module will cover different aspects of music perception including psychoacoustics and sound perception, music cognition including music memory emotion and expectancies, skilled performance as well as abnormalities in music perception and performance. The module will be taught in the form of seminars including student presentations. Emphasis will be placed on the development of critical thinking and the ability to relate conceptual debates in psychology to issues in the real world.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr I Jentsch			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Jentsch			

PS4084 Psychology of Art: Aesthetics and individual differences in visual function				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Mon			
This module examines the psychology of artistic activity and aesthetic appreciation, both from the standpoint of the artistic object (e.g., painting), as well as the individual who creates or appreciates art. Why are some things more aesthetically pleasing than others? Why do some people have a greater capacity to create aesthetic things? The module will explore the links between aesthetic creation and appreciation on the one hand and perceptual and cognitive processes on the other. These links will be examined from behavioural and neurological viewpoints. A significant emphasis will be on the neurological conditions that heighten differences in the capacity to create and appreciate aesthetic objects, including mental disorders (e.g., frontotemporal dementia, autism, epilepsy) and atypical cognitive development (e.g., synaesthesia, dyslexia). This will be a critical seminar style module with readings and discussions.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D Vishwanath			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Vishwanath			



**Psychology & Neuroscience - Honours Level - 2014/15 - August 2014**

<b>PS4085 Evolution and Development of Social and Technical Intelligence</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to undergraduate students in the second year of the Honours Programme. Also available to postgraduate students on M.Sc. Evolutionary and Comparative Psychology: the Origins of Mind			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri			
	The last two decades have witnessed a surge of research on social and technical intelligence, both in humans and an increasingly wide range of non-human animal species. This module surveys the principal discoveries, integrating field and captive studies, as well as both observational and experimental methodologies, to trace the evolution and development of aspects of social intelligence such as imitation and theory of mind, and technical intelligence, such as tool use and understanding of causality. Key aims include appreciating the range of methodologies that have been developed and how these can be used to trace the evolution and ontogeny of the underlying psychological mechanisms.			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Cross			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Cross			

<b>PS4086 Origins and Evolution of Mind Reading (Theory of Mind)</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to undergraduate students in the second year of the Honours Programme. Also available to postgraduate students on M.Sc. in Evolutionary and Comparative Psychology: the Origins of Mind			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue			
	The module will offer a comparative approach to the emergence of the ability to understand mental states in children and non-human primates, and its alteration in autism. This ability (also known as Theory of Mind) is at the heart of many of humans unique cognitive achievements, but their origins can be traced back in evolution and development. The course will discuss the current state of research in this area, emphasising both empirical and conceptual aspects posed by the combination of the evolutionary and developmental approaches.			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr J-C Gomez			
<b>Lecturer(s)/Tutor(s):</b>	Dr J-C Gomez			

Psychology & Neuroscience - Honours Level - 2014/15 - August 2014

PS4089 Neural Basis of Episodic Memory				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue			
This module will examine how the brain enables us to remember information from our personal experience. It will present students with cutting edge research using both humans and animals that gives us an insight into how the psychological components of episodic memory can be represented and processed by the brain. We will go on to look at how this type of research is applied in fields such as future thinking and memory decline in dementia. The course will include lectures and student presentations based around current research articles in the field.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, and Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J A Ainge			
<b>Lecturer(s)/Tutor(s):</b>	Dr J A Ainge			

PS4090 Face Perception and Human Attraction				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2014/5			
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Wed			
This advanced-level module will focus on face perception. The aim is to provide understanding of the development and evolutionary basis of driving forces behind human relationships and knowledge of the biological basis and psychological manifestations of these influences. Topics include: the neural basis of face attraction; development of face preferences; hormone influences on preferences and competition; sexual selection, kin selection; facial cues to health and social behaviour. Teaching will be based on the origin of individual differences, and the interaction between experience and biological factors in shaping human mate choice.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, and Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 0.5-hour lectures, 1.5-hour seminars and 1-hour office hour throughout the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof D Perrett			

**Psychology & Neuroscience - Honours Level - 2014/15 - August 2014**

<b>PS4091 Computer-aided Research</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme, or the M.Res. in Psychology.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Tue			
As research becomes ever more computationally intense, the ability to use modern research software is becoming indispensable. This practical module will offer an introduction to computational modelling and provide you with the skills necessary to apply it in your research. Emphasis will be put on using scientific scripting languages in a research context. This module will build on the statistical techniques learned in previous modules and introduce modelling techniques, and imaging, stimulus presentation, and data visualisation.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, and Neuroscience.			
<b>Pre-requisite(s):</b>	PS3021, PS3022 - Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr D W Hunter			
<b>Lecturer(s)/Tutor(s):</b>	Dr D W Hunter			

<b>PS4092 The Evolutionary Psychology of Religion and Belief</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri			
This module allows students to enhance their understanding of how evolution has shaped human psychology through the intriguing question of how religions emerged and persist. It explores the application of the theoretical framework of evolutionary psychology to this question through topics such as religion and emotion; the ascription of agency and causation; cooperation and social cohesion; the evolution of morality; religious practices as costly signals; the effect of religion on psychological and physical wellbeing. Teaching is based on lectures introducing each subtopic and student-led seminars emphasizing both conceptual and empirical aspects of this newly emerging field of study.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar, plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Arnold			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Arnold			

## Psychology & Neuroscience - Honours Level - 2014/15 - August 2014

PS4093 The Psychology of Dementia			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours programme		
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed		
This module will examine the psychology of dementia focusing on the cognitive and psychosocial impact on individuals with a diagnosis and those who care for them. Students will examine patterns of both lost and retained cognitive skills in people with dementia. We will then focus on how retained skills can be maximised and how the caregiving experience can be improved for both people living with dementia and their caregivers. The module will include lectures and student presentations based around current research articles in the field.			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.		
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture, 1 seminar plus office hour.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr M Ellis		
<b>Lecturer(s)/Tutor(s):</b>	Dr M Ellis		

PS4094 Communicating Psychology and Neuroscience			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours programme		
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon		
This module provides final year students within the School of Psychology and Neuroscience with first-hand experience of science communication through a series of expert led master-classes (e.g. Bright Club, BBC, print journalists, science bloggers), presentations and interaction with new media (e.g. podcasts, blogs, Twitter, FaceBook). This module will enable students to gain substantial experience of working to tight deadlines, evaluating how the media translates psychological/neuroscience findings and of communicating complex ideas at various different levels, including presenting work to the press, the public and school children. Topics covered may include: why scientists must communicate with the public; how psychology/neuroscience hits the headlines; evaluating media coverage; using new media to get the message across and designing a science exhibit. While of particular value to students aiming for a career in public engagement, these core skills are equally important for any career that requires good communication, including post-graduate study. In addition, students will be required to monitor relevant periodicals and evaluate several new studies in psychology/neuroscience and so should expose students to the latest trends within the field. Entry to this module is by selection following application and interview.			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.		
<b>Pre-requisite(s):</b>	PS3021 or PN3313	<b>Anti-requisite(s):</b>	ID4001 and ID4002
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lecture, plus office hour and occasional fieldwork.		
	<b>Scheduled learning:</b> 42 hours	<b>Guided independent study:</b> 108 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr K Spencer		
<b>Lecturer(s)/Tutor(s):</b>	Dr K Spencer, Mr P L Gardner		

**Psychology & Neuroscience - Honours Level - 2014/15 - August 2014**

<b>PS4095 Psychopathology</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours programme			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed			
This module aims to describe mental disorders from a psychodynamic, behavioural, cognitive, and neuropsychiatric perspective. Classification systems of mental disorders are compared and evaluated, and research methods and treatment strategies critically discussed. The clinical part of the module focuses on adult mental health (e.g., Mood disorders, Schizophrenia Spectrum disorders, Obsessive compulsive disorders, Trauma and Stress related disorders) and Developmental Psychopathology (e.g., Autism Spectrum disorders).				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lecture plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr R Sprengelmeyer			
<b>Lecturer(s)/Tutor(s):</b>	Dr R Sprengelmeyer			

<b>PS4096 Mechanisms of Behaviour: Integrating Psychological and Neuroscience Perspectives</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours programme			
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu			
The aim of this module is to explore some of the many physiological and neural systems that modulate patterns of behaviour in a range of species, including humans. It will highlight the importance of integrating information from psychology and neuroscience disciplines in order to further our understanding of how and why animals and humans behave the way they do in different situations. The module will deal with examples of mechanisms across different levels of complexity (from genes to physiology). The module will include lectures and student presentations/journal club discussions based around current research articles in the field and a practical session with hands on experience of a physiological technique.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lecture (x 10 weeks), 1 practical class (x 4 weeks) plus office hour.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Spencer			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Spencer			

**Psychology & Neuroscience - Honours Level - 2014/15 - August 2014**

<b>PS4100 The Psychology of Terrorism (PENDING APPROVAL)</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours programme			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu			
This module presents the psychological underpinnings of terrorist behaviour from a variety of perspectives. The course will assess individual- and group-/structural-level explanations of terrorism, discuss the strategic logic and moral justification of terrorism, and cover some of the psychological processes involved in the radicalisation of individuals and the operation of terrorist groups. The final part of the module will examine the effects of terrorism on constituencies and target groups and the implications of psychological insights for counter-terrorism measures.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lecture plus office hour.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Module Co-ordinator:</b>	Dr N Tausch			
<b>Lecturer(s)/Tutor(s):</b>	Dr N Tausch			

<b>PS4299 Psychology Project (60)</b>				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours programme			
<b>Planned timetable:</b>	To be arranged.			
This project will involve extensive laboratory or field research to investigate a defined problem broadly within psychology. The project will involve diligence, initiative and independence in pursuing the literature, good experimental design, good experimental and/or analytical technique either in the field or the laboratory, and excellent record keeping. The project will culminate in the production of a high-quality report that demonstrates a deep understanding of the chosen area of research. Students will be allocated to a member of staff within the School of Psychology and Neuroscience who will guide and advise them in research activities throughout the academic year.				
<b>Programme module type:</b>	Optional for Single Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.			
<b>Pre-requisite(s):</b>	PS3021, PS3022 and PS4040. Grades of 11 or better in PS2001 and PS2002 or entry into Honours Psychology			
<b>Anti-requisite(s):</b>	PS4050, PS4060, PN4299			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour individual supervision sessions.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 580 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 35%, Coursework = 65%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr R Sprengelmeyer			
<b>Lecturer(s)/Tutor(s):</b>	various			

## Interdisciplinary (ID) Modules

ID4001 Communication and Teaching in Science				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to final year students who have been accepted following application and interview in the preceding semester.			
<b>Planned timetable:</b>	Flexible			
<p>This module is based on the Undergraduate Ambassador Scheme launched in 2002. It provides final year students within the Faculty of Science with the opportunity to gain first hand experience of science education through a mentoring scheme with science teachers in local schools. Students will act initially as observers in the classroom and later as classroom assistants. With permission of the teacher-in-charge, students may also be given the opportunity to lead at least one lesson, or activity within a lesson, during their placement. This module will enable students to gain substantial experience of working in a challenging and unpredictable working environment, and of communicating scientific ideas at various different levels; and to gain a broad understanding of many of the key aspects of teaching science in schools. While of particular value to students aiming for a career in education, these core skills are equally important for any career that requires good communication. Entry to this module is by selection following application and interview during the preceding semester.</p>				
<b>Programme module type:</b>	Optional for degrees in the Faculty of Science who meet the appropriate criteria.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Occasional tutorials and a half-day training session.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 120 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 55%, Coursework = 45%			
	<b>As used by St Andrews:</b> Coursework = 100% comprising: Written report on the placement (35%) Teacher's assessment of student's placement (25%) Oral presentation (30%) Project proposal (10%)			
<b>Module Co-ordinator:</b>	Dr B Sinclair			

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ID4002 Communication and Teaching in Arts and Humanities				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the Schools of Divinity, Geography & Geosciences, History, International Relations, Modern Languages or Departments of Philosophy.			
<b>Planned timetable:</b>	To be arranged.			
This module provides final year students within the Faculties of Arts and Divinity with the opportunity to gain first hand experience of education through a mentoring scheme with teachers in local schools. This module will enable students to gain substantial experience of working in a challenging and unpredictable working environment, and to gain a broad understanding of many of the key aspects of teaching in schools.				
<b>Programme module type:</b>	Optional for Classics, Divinity, Geography, History, International Relations, Modern Languages, Philosophy or Social Anthropology.			
<b>Co-requisite(s):</b>	If taken within Divinity, History, International Relations or Philosophy, a further 15-credit subject-specific module may be required. TBC			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> The module commences with an Induction Event at the University (3 hours). Students spend a minimum of 20 hours during the semester at their placement. 3 x 1-hour tutorials are held at the University during the semester. The module concludes with an oral presentation session.			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 122 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework = 100% comprising: Written project proposal (10%) + written report (35%) = 45% Oral presentation (at University, assessed by module lecturers) = 30% A further 25% of Coursework is in the form of a report by their placement-mentor on the student's practical performance in the classroom on placement.			
<b>Module Co-ordinator:</b>	Dr E Stoddart			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Stoddart			



ID4442 Combined Research Project in Biology and Geology				
<b>SCOTCAT Credits:</b>	45	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged.			
<p>This module provides an individual research project on a topic spanning the biological and geological sciences which allows the student to pursue in depth a topic of personal interest. The student works largely independently of supervision and has the opportunity to demonstrate individuality, initiative and enterprise. The project will be supported by advisors in both Biology and Geology. Skills of planning and executing research are learnt, as well as the ability to work independently, and present the results orally and in dissertation form (up to 10,000 words). (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory for B.Sc. Honours programme in Biology and Geology			
<b>Pre-requisite(s):</b>	Admission to BSc Honours programme in Biology and Geology			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision by member(s) of teaching staff			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 430 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	<b>As used by St Andrews:</b> Research proposal = 5%, Oral Presentation = 10%, Dissertation = 85%			
<b>Module Co-ordinator:</b>	Dr T Raub			
<b>Lecturer(s)/Tutor(s):</b>	Dr T Raub			

ID5059 Knowledge Discovery and Datamining				
<b>SCOTCAT Credits:</b>	15	SCQF Level 11	<b>Semester:</b>	2
<b>Planned timetable:</b>	11.00 am Mon (odd weeks), Wed and Fri			
<p>Contemporary data collection can be automated and on a massive scale e.g. credit card transaction databases. Large databases potentially carry a wealth of important information that could inform business strategy, identify criminal activities, characterise network faults etc. These large scale problems may preclude the standard carefully constructed statistical models, necessitating highly automated approaches. This module covers many of the methods found under the banner of "Datamining", building from a theoretical perspective but ultimately teaching practical application. Topics covered include: historical/philosophical perspectives, model selection algorithms and optimality measures, tree methods, bagging and boosting, neural nets, and classification in general. Practical applications build sought-after skills in the commercial packages SAS and SPSS.</p>				
<b>Programme module type:</b>	Optional for M.Sci. in Computer Science			
<b>Anti-requisite(s):</b>	MT5759			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars, tutorials and practical classes.			
	<b>Scheduled learning:</b> 35 hours		<b>Guided independent study:</b> 115 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	masters-coord-cs@st-andrews.ac.uk			

