### 2016 - 2017 Honours Level Module Catalogue



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### **Curriculum development**

The University will use all reasonable measures to deliver courses of study as they are outlined at the time of offer. However, as a research intensive institution, the University ensures that its teaching is based on and references the research and related interests of its staff, which may change from time to time.

We are also mindful of the best use of our resources to ensure the highest quality experience for our students. As a result, programmes and modules are regularly reviewed with the aim of enhancing students' learning experience.

Any changes are made with due consideration to minimising impact, safeguarding academic standards and assuring quality, and are described at:

www.st-andrews.ac.uk/media/teaching-and-learning/policies/course-revision-protocol.pdf

#### 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**. The number of credits associated with a module gives an indication of the amount of learning involved. For example, 1000-level modules in the School of Art History are each 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. See also Level (below) and

http://scqf.org.uk/wp-content/uploads/2014/03/SCQF-Revised-Level-Descriptors-Aug-2012-FINAL-web-version 1.pdf

**Semester.** The Semester or Semesters in which the module is taught. '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.** Where a single time is given (e.g. 9.00 am) the class meets for one hour. If days of the week are not specified, the class meets every day from Monday to Friday, with the usual exception of Wednesday afternoons. Further details may be provided in this field.

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

**Pre-requisite(s).** Modules or qualifications which must be passed prior to this module. 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 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 where a module is required to be passed, as a pre-requisite for another module.

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

**Compulsory / Optional.** In the 'Programme module type' field, modules are identified as either 'Compulsory' or 'Optional' for a programme or group of programmes. 'Compulsory' modules must be taken for the programmes named. Modules defined as 'Optional' are appropriate to fulfil degree credit requirements for the named programme(s). Students may select 'Optional' modules and will be allowed entry to those modules which are agreed with their Adviser of Studies for each year of study.

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

**Weekly Contact.** This will be an indication of the weekly teaching provision for each student. Where the pattern of teaching varies from week to week, **the average weekly contact is given**. Various activities may be included. (tutorials, laboratory work, practical sessions, lectures, fieldwork, consultation hours etc).

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

#### Introduction - Honours Level - 2016/7 - August 2016

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

Assessment pattern. A brief description of the distribution between assessed 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.

**Re-Assessment pattern.** This is the method by which a module will be re-assessed if it is failed in the main assessment.

**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.

### **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								
	SCOTCAT Credits: 30 SCQF Level 9 Semester: 2							
	Academic year:	2016/7 & 2017/8 3.00 -5.00pm Mon (lecture ) and either 9.00 or 10.00am Tues (seminar)						
	Planned timetable:							

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr J Howard		
Lecturer(s)/Tutor(s):	Dr J Howard		

### **AH3116 Aspects of American Art in the Modern Period**

aspects of American Art in the Modern Ferrod						
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2		
Academic year:	2017/8					
Planned timetable:	11.00 am - 1.00 pm Tue (lecture) and either 11.00 am or 12.00 noon Fri (seminar)					

This module will examine key moments in the history of American art, concentrating on the period c.1880-1945. It is designed to explore the general trends and developments, key turning-points, and episodes of crisis. In this respect it will provide an art historical study of the period, while simultaneously examining theoretical and aesthetic shifts, and placing these changes within the context of social and historical events.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour lecture and 1 seminar (x 11 weeks), 2 x tutor's office hours (x 12 weeks), Fieldtrip - 8 hours			
	Scheduled learning: 65 hours Guided independent study: 235 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr T Normand			
Lecturer(s)/Tutor(s):	Dr T Normand			

### **AH3196 Modern Art Beyond the West**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	9.00 am - 11.00 am Thu (lecture) and either 3.00 or 4.00 pm Thu (seminar)			

Prompted by globalisation in the present day, many have suggested that narratives of modern art focused on Western cities such as Paris and New York now seem provincial or inadequate. This course examines the rise of early to mid-twentieth century 'modern' art in a range of countries not usually considered in Western survey courses. In doing so it will ask what it means to study modernism in and outside the West in the present day, as well as whether it is still useful to think in terms of such overarching categories as 'modernism', the 'global', and the 'non-Western'.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1 hour seminar			
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 270 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr S Rose			
Lecturer(s)/Tutor(s):	Dr S Rose			

### AH4078 Art and Politics in France (1945 - 1975)

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2	
Academic year:	2017/8				
Planned timetable:	To be arranged.				

This module examines the major artists and groups in French postwar art through a consideration of aesthetic features and theoretical issues in tandem with their social and political context. The problems facing the neo-avant garde following the war will be assessed by looking at topics such as Dubuffet and Art Brut, Socialist Realism, Giacometti and Existentialist philosophy, abstract painting, Yves Klein and the 'New Realists', the Cobra group, the Situationists and the May '68 uprising, and post-1968 projects by Daniel Buren, Christian Boltanski and Annette Messager. Additional topics for discussion include the relationship of French culture to British and American culture, 1950s design, NewWave cinema, and the impact of the Cold War and the Algerian War.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching	Weekly contact: 1 x 2-hour lecture, 1 x	1-hour seminar.		
methods and delivery:	Scheduled learning: 65 hours	Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr N Adamson			
Lecturer(s)/Tutor(s):	Dr N Adamson			

### AH4081 The Scandinavian Art of Building and Design (1890-1960)

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2017/8			
Planned timetable:	To be arranged.			

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 Scandinavias 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.

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Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching methods and delivery:	<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			
	Scheduled learning: 65 hours Guided independent study: 235 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	As used by St Andrews:			
	2-hour Written Examination = 30%, Coursework = 70%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr S Kallestrup			
Lecturer(s)/Tutor(s):	Dr S Kallestrup			

SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 20	017/8		•	
Availability restrictions:	Available or	nly to students in the sec	ond year of the Hor	ours Programme.	
Planned timetable:	As arranged	As arranged with Supervisor and Honours Adviser			
The dissertation will be valu length. Topics must be capak assigned a supervisor, who semesters, and (b) be require meeting per semester. (Guide http://www.st-andrews.ac.u	ole of being su will be availand and to attend on Alines for print	pervised by the School's able to discuss issues in the general lecture on resing and binding disserta	s established staff ar related to the disso search and at least o	nd each student will (a) lertation throughout boone 50-minute superviso	
Programme module type:	Either AH4097 or AH4099 is compulsory for Single Honours Art History.				
	Optional for Joint Honours Art History				
Pre-requisite(s):		d AH2002 - with ade 11 or better in	Anti-requisite(s):	AH4099	
Learning and teaching methods and delivery:	seminar; 1 x seminar; 2	Ntact: During the semest of 1-hour pre-supervisory of 1-hour supervisory me wew meeting.	meeting; 1 x 1-hou	dissertation writing	
	Scheduled I	earning: 8 hours	Guided indepe	ndent study: 592 hours	
Assessment pattern:	As defined   Written Exa	by QAA: minations = 0%, Practica	al Examinations = 0%	%, Coursework = 100%	
	As used by St Andrews: Dissertation = 100%				
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners				
Module Co-ordinator:	Dr T Normand				
Lecturer(s)/Tutor(s):	Team taught				

### Art History - Honours Level - 2016/7 - August 2016

# AH4099 30-Credit Dissertation in Art History SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: As arranged with Supervisor and Honours Adviser

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.

(Guidelines for printing and binding dissertations can be found at:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Either AH4097 or AH4099 is compulsory for Single Honours Art History. Optional for Joint Honours Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.	Anti-re	equisite(s):	АН4097
Learning and teaching methods and delivery:	<b>Weekly contact</b> : During the semester, in total there will be $1 \times 1$ -hour briefing seminar; $1 \times 1$ -hour pre-supervisory meeting; $1 \times 1$ -hour dissertation writing seminar; $2 \times 1$ -hour supervisory meetings; $1 \times 2$ -hour presentation seminar; $1 \times 1$ -hour review meeting.			
	Scheduled learning: 8 hours Guided independent study: 292 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr T Normand			
Lecturer(s)/Tutor(s):	Team taught	_		

### AH4108 Post-war Scottish Art 1950-present

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2017/8			
Planned timetable:	11.00 am - 1.00 pm Tue (lecture), and either 11.00 am or 12.00 noon Fri (seminar)			12.00 noon Fri

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr T Normand		
Lecturer(s)/Tutor(s):	Dr T Normand		

### AH4130 Realism and Symbolism in Russian Art 1860 - 1910

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	3.00 - 5.00 pm Mon (lecture) and either 9.00 or 10.00am Tues (seminar)			

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr J Howard		
Lecturer(s)/Tutor(s):	Dr J Howard		

### AH4140 The Grand Tour: The Artistic Relations between Britain and Italy in the Eighteenth Century SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 9.00 am Mon and 9.00 am Tue (lecture) and either 9.00 am or 12.00 noon Wed

Travelling for education and pleasure, and particularly to Italy, reached new heights of popularity in the eighteenth century. The experience was to have a decisive impact on British art and taste. This module will examine the phenomenon of the Grand Tour in its artistic manifestations to be explored under the following headings: the Social and Cultural World of Tourists; Sights and Cicerones; the Lure of the Antique; British artists in Italy; Portraitists and Landscapists; Patrons and Teachers; Italian artists in Britain; Dealers and Collectors; Souvenirs.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching	Weekly contact: 2 x 1-hour lectures, 1 x 1-hour tutorial per week.		
methods and delivery:	Scheduled learning: 65 hours	Guided independent study: 235 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%		
	As used by St Andrews: 2-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	1 x Written Assignment to be arranged by the Board of Examiners.		
Module Co-ordinator:	Professor B Cassidy		
Lecturer(s)/Tutor(s):	Professor B Cassidy		

AH4148 Orientalism and Visual Culture					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	11.00 am - 1.00 pm Wed (lecture) and either 9.00 am or 11.00 am Thu (seminar)			

In this module we examine Orientalist art and the culture of travel from a post-colonial perspective. As well as the work of renowned artists including Ingres, Delacroix, Girome, J.F. Lewis, and Matisse we will address photography, international exhibitions, cross-cultural dressing, travel literature and film. Diverse European constructions of the exotic Orient will be examined including the contribution of women Orientalists. In this module, the European canon of Orientalism is resituated through the introduction of counter-narratives and alternative images made by North African and Ottoman artists and patrons.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews:		
	2-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr L Gartlan		
Lecturer(s)/Tutor(s):	Dr L Gartlan		

### Art History - Honours Level - 2016/7 - August 2016

# AH4156 Seeing the Sixties SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2017/8 Planned timetable: 11.00 am Tues and 10.00am Wed (lectures) and either 11.00am or 12 noon Fri

This module examines some of the most innovative art practices of the 1960s, predominantly in the United States, but also encompassing various art trends in Europe, Asia and South America. During this period, modernist preoccupations with the integrity of the medium yielded to a series of more diverse and competing approaches to art-making. Many of these we will be considering - from the collapse of high modernism, the rise of Pop Art, the phenomenon of Minimalism, the emergence of process art, anti-form, computer art, conceptual art, site-specificity, earth art, artist-initiated modes of political protest, feminist art, video art, and innovations in performance art. We shall examine some of the larger social and cultural pressures which informed these various positions. Throughout, the aim is to foster awareness that how we choose to understand the broader legacies of the Sixties will shape the way we view the art produced during this period.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews:		
	2-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr A Rider		
Lecturer(s)/Tutor(s):	Dr A Rider		

# AH4161 Gauguin and Primitivism SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 10.00 am Tues and 9.00am Wed (lectures) and either 10.00am or 11.00am Thurs (seminar)

Paul Gauguin's (1848-1903) influential career and unconventional life continue to provoke both admiration and controversy. This module examines his painting, sculpture, graphic art, and writing, in the context of European modernism?s obsession with the 'primitive'. It explores how Gauguin and associated artists including Van Gogh, the Nabis, and Picasso projected mythical values onto non-Western and rural cultures in their search for difference and 'authenticity'. Focusing on Gauguin's travels to Brittany, Arles, Martinique and Polynesia, we will examine his self-construction as an outsider in self-portraiture and autobiographical writing, his use of deliberately naive and anti-academic media and techniques, and his exploitation of both colonial and indigenous sources. We will pay particular attention to shifts in his critical reception, from his glorification as a ?noble savage? in early biographical accounts, to his exposure as a cultural and sexual tourist in feminist and postcolonial readings.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching	Weekly contact: 2 x 1-hour lectures, 1 x 1 hour seminar.		
methods and delivery:	Scheduled learning: 65 hours Guided independent study: 235 hour		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr L Goddard		
Lecturer(s)/Tutor(s):	Dr L Goddard		

### **AH4163 Approaches to Modern Sculpture**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	11.00 am Tue and 10.00 am Wed (lectures) and either 11.00 am or 12.00 noon Fri (seminar)			

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews:		
	2-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr A Rider		
Lecturer(s)/Tutor(s):	Dr A Rider		

### AH4164 The Patronage of the Arts in the Este and Gonzaga Courts c. 1440 - c.1590

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2017/8	2017/8			
Planned timetable:	To be arranged.				

In the fifteenth and sixteenth centuries the courts of the Este in Ferrara and the Gonzaga in Mantua were relatively small in comparison to other Italian courts, yet their prestige was due in large measure to their patronage of the arts and to their strategic position of military influence between papal and imperial power. With their hunger for novelty, love of magnificence, and thirst for recognition, they played a key role in the dissemination and development of Renaissance ideas. Through an in-depth analysis of buildings, sculptures, manuscripts and paintings the module explores how the towns of Ferrara and Mantua were transformed into innovative artistic centres. Artists covered include Donatello, Piero della Francesca, Andrea Mantegna, Cosme Tura, Dosso Dossi, Titian, Leon Battista Alberti, Biagi o Rossetti, Giulio Romano, and many others.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching	Weekly contact: 2 x 1-hour lectures, 1 x 1-hour seminar.			
methods and delivery:	Scheduled learning: 65 hours	Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	As used by St Andrews:			
	2-hour Written Examination = 30%, Coursework = 70%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr L Moretti			
Lecturer(s)/Tutor(s):	Dr L Moretti			

### AH4166 Histories of Photography (1835 - 1905) SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 11.00 am - 1.00 pm Wed (lecture) and either 9.00 am or 11.00 am Thu (seminar)

This module examines the diverse histories of photography in the nineteenth century from the beginnings of the medium to the rise of modernist photography. Among numerous topics, the module examines ware photography in Victorian Britain, portraiture and celebrity, imperial landscapes, the modern city, exploration photography, Kodak and modern tourism, and the body of photography. Students will become familiar with the work of major photographers of the period, including Fox Talbot, Hill and Adamson, Julia Margaret Cameron, Lady Hawarden, Lewis Carroll, Nadar and Alexander Gardner.

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Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 65 hours Guided independent study: 235 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr L Gartlan	Dr L Gartlan		
Lecturer(s)/Tutor(s):	Dr L Gartlan			

AH4167 9	AH4167 Symbolism, Decadence and Modernity					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
	Academic year:	2016/7				
	Availability restrictions:					
	Planned timetable:	10.00 am Tue and 9.00 am Wed (lectures) and either 10.00 am or 11.00 am Thu (seminar)				

Exploring the Symbolist movement from an international perspective, this module will cover groups including the Nabis, the Italian Divisionists, and the British Aesthetic Movement, setting them in the context of contemporary aesthetic, scientific and social debates. Until recently, histories of Symbolism isolated a few stylistically experimental figures such as Munch, Gauguin and Klimt from the messier melting-pot of misogyny, nationalism and mystical fervour. This module confronts head-on the movement's uncomfortable blend of tradition and modernity, stylistic innovation and thematic obsessions. Students will explore themes including dream and nightmare, spirituality and the occult, nationalism and myth, evolution and degeneration, sexuality and the femme fatale. In the spirit of the fin-de-siecle 'total art work', we will pay particular attention to the crossovers between text and image, and between the 'fine' and 'decorative' arts.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching	Weekly contact: 2 x 1-hour lectures and 1 x 1-hour seminar.			
methods and delivery:	Scheduled learning: 65 hours	Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr L Goddard			
Lecturer(s)/Tutor(s):	Dr L Goddard			

# AH4170 Art, Piety and Performance: Charitable Institutions in Early Modern Venice SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 (16/7) 2 (17/8) Academic year: 2016/7 (sem 1) & 2017/8 (sem 2) Planned timetable: 10.00 am Mon and 12.00 noon Tue (lectures) and either 10.00 am or 11.00 am Wed (seminar)

During the Early Modern period, an elaborate network of charitable institutions developed in Venice. The scuole, self-governing lay brotherhoods, and the ospedali, state-run hospitals, were distinctive social institutions, and the source of an important and characteristic type of patronage, commissioning works of art from the major artists of the period, such as Gentile and Giovanni Bellini, Carpaccio, Titian, Sansovino, Tintoretto, Palladio and Giambattista Tiepolo, among others. These institutions often staged public spectacles and performed charitable acts within a highly-regulated civic environment, playing an important role in the civic and religious ritual of Venice. This module explores how art and architectural projects advanced the devotional and charitable claims of Venetian confraternities and hospitals during the Early Modern period, focusing on the role played by these institutions in urban life and in perpetuating the 'myth of Venice'.

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Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar			
methods and delivery:	Scheduled learning: 65 hours	Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	As used by St Andrews:			
	Coursework = 70%, Written Examination = 30%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr L Moretti			
Lecturer(s)/Tutor(s):	Dr L Moretti			

AH4171 The Arts of Pilgrimage in the Middle Ages					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2017/8			
	Planned timetable:	To be arranged.			

Pilgrimage is travel toward a shrine or religious goal. Countless European Christians went on pilgrimages in the Middle Ages, traveling to the three largest shrines - Jerusalem, Rome, and Santiago - as well as to hundreds of smaller local shrines, including one at St Andrews, where worshippers flocked to see the relics of the apostle. How did images both shape and reflect their experience? This course considers imagery in a variety of media - including architecture, architectural sculpture, illuminated manuscripts and reliquary shrines - in its religious and political contexts. Topics include the function of pilgrimage architecture; the trade and theft of relics; the shifting interest in late medieval devotion toward the humanity of Christ and, along with it, the interest in walking in his footsteps in Jerusalem; local pilgrimages in the British Isles, France and the Low Countries; pilgrimage and miracles; virtual, imagined and penitential pilgrimage; pilgrims' souvenirs; and narratives of pilgrimage, both real and allegorical.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour lecture, 1 x 1-hour seminar (x 11 weeks), 2 x tutor's office hours (x 12 weeks), fieldtrip - 8 hours.		
	Scheduled learning: 65 hours	Guided independent study: 235 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr K Rudy		
Lecturer(s)/Tutor(s):	Dr K Rudy		

### **AH4172 Manuscript Illumination in Western Europe**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2017/8	2017/8			
Planned timetable:	To be arrange	To be arranged.			

This module considers the medieval manuscript from the fourth through the sixteenth centuries, with an emphasis on the illumination of the book. The subject will be bookended by two innovations, the development of the codex in favour of the roll in the Early Christian period, and the move from manuscript to print in the fifteenth and early sixteenth centuries. This course will not present an exhaustive survey of all manuscripts made in Western Europe, but will concentrate on certain themes: the physical construction of the manuscript; early Bible imagery; Insular decoration; scientific manuscripts; women as readers; and the interpretation of marginal imagery.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching methods and delivery:	<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			
	Scheduled learning: 65 hours Guided independent study: 235 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr K Rudy			
Lecturer(s)/Tutor(s):	Dr K Rudy			

### AH4173 Architecture and its Image. From Brunelleschi to Palladio

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SCOTCAT Credits:	30 SCQF Level 10 <b>Semester:</b> 2			
Academic year:	2016/7			
Planned timetable:	10.00 am Mon and 12 noon Tue (lectrures) and either 10.00 am or 11.00 am Wed (seminar)			

The module explores the different ways in which architecture was represented during the Italian Renaissance, looking at some of the finest buildings ever created by some of the most innovative architects, which influenced European and American architecture for centuries. Starting with some well-known representations of imaginary buildings, or 'ideal architecture', we will consider depictions of temporary structures and architectural projects in medals and bas-relief, as well as how architecture was illustrated in sketches, models, workshop drawings, paintings, maps, and described in texts. The core of the module will be a study of actual buildings in relation to their simulacra. Artists covered will include Filippo Brunelleschi, Leon Battista Alberti, Andrea Mantegna, Piero della Francesca, Vittore Carpaccio, Jacopo Bellini, Donato Bramante, Raphael, Baldassarre Peruzzi, Sebastiano Serlio, Giulio Romano, Michelangelo, Jacopo Sansovino, Andrea Palladio and others.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching	Weekly contact: 2 x 1-hour lectures an	d 1 x 1-hour seminar		
methods and delivery:	Scheduled learning: 65 hours	Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	As used by St Andrews:			
	Coursework = 70%, Written Examination = 30%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Dr L Moretti			
Lecturer(s)/Tutor(s):	Dr L Moretti	Dr L Moretti		

### Art History - Honours Level - 2016/7 - August 2016

### AH4174 Pilgrimage to Santiago de Compostela SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 1.00 pm - 3.00 pm Tue (lecture) and either 9.00 am or 12.00 noon Thu (seminar)

Santiago de Compostela in north-western Spain became the most important destination for Christian pilgrimage besides Rome and Jerusalem. Beginning in the tenth century, hundreds of thousands of regular people left their towns, cities, and villages for several months to walk on the well-beaten path. Purported to have the relics of St James the Greater, the city of Santiago built ever-greater structures to house these treasures and to impress and attract pilgrims. Pilgrimage became a form of large-scale tourism, with sites along the road competing to attract visitors and their money. The most popular churches, such as Conques, necessarily grew to accommodate the throngs. Crowd control inspired new forms of architecture, which we still experience in large buildings today, such as Ikea. We will seek to understand the early medieval cult of relics, and the role that churches played in Europe during periods of weak government. We will also study this early form of tourism and its marketing ploys.

Optional for Art History	
AH2001 and AH2002 - with passes at grade 11 or better in both.	
AH4171	
Weekly contact: 1 x 2-hour lecture	e and 1 x 1 hour seminar (x 11 weeks)
Scheduled learning: 37 hours	Guided independent study: 264 hours
As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%	
Dr K Rudy	
Dr K Rudy	
	AH2001 and AH2002 - with passes AH4171  Weekly contact: 1 x 2-hour lecture Scheduled learning: 37 hours  As defined by QAA: Written Examinations = 0%, Practic As used by St Andrews: Coursework = 100%  1 x Written Assignment to be agree Dr K Rudy

### AH4175 Luxury Goods in the Middle Ages SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 3.00 pm - 5.00 pm Tue (lecture) and either 10.00 am or 12.00 noon Thu (seminar)

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.

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr K Rudy		
Lecturer(s)/Tutor(s):	Dr K Rudy		

#### **AH4190 Romanticism and Visuality**

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	SCOTCAT Credits:	30 SCQF Level 10 Semester: 1		1	
	Academic year:	2016/7			
	Planned timetable:	anned timetable: To be arranged.		_	

This module examines European romanticism and its relation to a broader field of visual practices. We will explore stylistic transformations in late eighteenth- and early nineteenth-century art and consider how romantic artists responded to a rapidly modernising 'visual culture'. Each unit will examine the work of one artist and ask: what kind of optical technologies and visual media were in use in this period? How was the category of 'the visual' being treated in fields like science and philosophy? What consequences did this have for artistic production? We will study the work of, among others, Anne-Louis Girodet, Francisco Goya, Caspar David Friedrich and J.M.W. Turner. In this module, students will think critically about how vision itself might have a history and what this would mean for artistic representation.

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Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching	Weekly contact: 2 x 1-hour lectures (x	x 10 weeks), 1 x 1-hour tutorial (x 10 weeks)	
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 280 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr S O'Rourke		
Lecturer(s)/Tutor(s):	Dr S O'Rourke		

### **AH4196 English Art and Modernism**

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	9.00 am - 11.00 am Thu (lecture) and either 3.00 or 3.00 pm Thu (seminar)			pm Thu (seminar)

Focusing on the years 1910-1960, this module will examine the ways that artists in England have developed a range of approaches to the idea of modern art.It will examine artists' responses to developments in modernism in Europe and elsewhere, but also their efforts to draw on national and pre-modernist tradition. Other aspects covered will include craft and architecture, mass 'visual' culture, and the onset of the end of modernism in England.

Programme module type:	Optional for Art History	
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 x 1-hour lecture (x 10 weeks) and 1 x 1 hour seminar (x 10 weeks) and 4 hours of fieldwork over the semester	
	Scheduled learning: 34 hours Guided independent study: 270 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%	
	As used by St Andrews: Coursework = 100%	
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners	
Module Co-ordinator:	Dr S Rose	
Lecturer(s)/Tutor(s):	Dr S Rose	

### AH4205 Byzantium, 330 - 1453: Art, Religion and Imperial Power SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 11.00 am - 1.00 pm Thu (lecture) and either 3.00 pm or 4.00 pm Thu (seminar)

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.

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours	Guided independent study: 235 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews:		
	2-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr L Kouneni		
Lecturer(s)/Tutor(s):	Dr L Kouneni		

#### **AH4208 The Portrait in Western Art**

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	20167 & 2017/8			
Planned timetable:	11.00 am – 1.00 pm Thu (lecture) and either 3.00 pm or 4.00 pm (seminar)			

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr E van Kessel		
Lecturer(s)/Tutor(s):	Dr E van Kessel		

#### **AH4211 Islam and the Arts**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2017/8			
Planned timetable:	12.00 noon - 2.00 pm Fri (lecture) and either 3.00 or 4.00 pm Fri (seminar)			

How did the religion of Islam affect the art produced in the Muslim world? This module will explore problems of iconoclasm in a wide context that includes pictures of the Prophet Muhammad, the conflict between orthodox Islam and Sufism and Shi'ism, and the Muslim treatment of Old and New Testament themes. Since the most obvious physical expression of Islam as a faith is in architecture, the module will look at the origins and development of some of the major Islamic buildings as well as the various elements that make up this architecture. The art of Qur'anic calligraphy and illumination will also figure largely, as will the role of inscriptions not only on religious buildings but in everyday contexts. Finally, the course will explore not only how the Islamic faith finds visual expression in modern times as a living force, but also what visual clichés have been developed by Western media for the hostile representation of Islam.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours Guided independent study: 235 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews:		
	2-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Prof R Hillenbrand		
Lecturer(s)/Tutor(s):	Prof R Hillenbrand		

# AH4213 Dada and Surrealism SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 2016/7 Planned timetable: 11.00 am - 1.00 pm Mon (lecture) and either 9.00 am or 10.00 am Wed (seminar)

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. 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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 65 hours	Guided independent study: 235 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews:		
	2-hour Written Examination - 30%, Coursework = 70%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr S Kallestrup	Dr S Kallestrup	
Lecturer(s)/Tutor(s):	Dr S Kallestrup		

### AH4215 Contemporary Art and the Ethics of Fieldwork SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 3.00 - 5.00 pm Tue (lecture) and either 10.00 am or 12.00 noon Thu (seminar)

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.

Programme module type:	Optional for Art History		
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour lecture, 1 x 1-hour seminar (x 10 weeks) 2 x tutor's office hour (x 12 weeks), fieldtrip - 4 hours		
	Scheduled learning: 56 hours Guided independent study: 244 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners		
Module Co-ordinator:	Dr C Spencer		
Lecturer(s)/Tutor(s):	Dr C Spencer		

### AH4216 Mediaeval Islamic Painting SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 12.00 noon - 2.00 pm Fri (lecture) and either 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 Assemblies of al-Hariri, the Quintet of Nizami and Firdausi's Book of Kings, 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.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching methods and delivery:	<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			
	Scheduled learning: 65 hours Guided independent study: 235 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	As used by St Andrews:			
	2-hour Written Examination = 30%, Coursework = 70%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Prof R Hillenbrand			
Lecturer(s)/Tutor(s):	Prof R Hillenbrand			

AH4220 Transatlantic Image Making: American and British Art 1750 - 1850					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	To be arranged.		_	_

This module critically examines the work of artists such as John Singleton Copley, Charles Willson Peale, Benjamin West, and the Scottish-born John Smibert among others as points of cultural exchange in the Anglo-American world of 1750-1850. Select works of art are positioned within the historical, social, political, intellectual, and economic contexts in which they were created. The module is structured thematically to explore connections between the visual arts and global trade, personal and national identities, emergent technologies, and the politics of representation. The format is a combination of formal lectures, seminars, and a group visit to the Scottish National Portrait Gallery in Edinburgh. Students are expected to maintain a learning journal.

Programme module type:	Optional for Art History			
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 x 1-hour lecture (x 10 weeks) , 1 x 1-hour seminar (x 10 weeks) fieldtrip - 4 hours			
	Scheduled learning: 34 hours Guided independent study: 266 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	As used by St Andrews:			
	2-hour Written Examination = 30%, Coursework = 70%			
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners			
Module Co-ordinator:	Prof J Bullington			
Lecturer(s)/Tutor(s):	Prof J Bullington			

AH4230 Approaches to Art History	30 Approaches to Art History					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1		
Academic year:	2016/7 & 2017/8	3				
Planned timetable:	11.00 am - 12.30 am - 12.30 pm W	. , ,	nd either 3.30 pm - 5	5.00 pm Mon or 11.00		
History. It is designed to enco	des an introduction to the most significant critical approaches employed in Art ourage students to consider new ways in which they might think about art, society from aesthetics, semiotics, psychoanalysis, feminism and phenomenology, to aphy.					
Programme module type:	Compulsory for Single Honours Art History. Optional for Joint Honours Art History.					
Pre-requisite(s):	AH2001 and AH2002 - with passes at grade 11 or better in both.					
Anti-requisite(s):	AH3130					
Learning and teaching methods and delivery:	•	1 x 1.5-hour lecture, ır (x 12 weeks), fieldt		ar (x 11 weeks) 2 x		
	Scheduled learni	ing: 65 hours	Guided independ	dent study: 235 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	1 x Written Assignment to be agreed by the Board of Examiners					
Module Co-ordinator:	Dr S Kallestrup and Dr C Spencer					
Lecturer(s)/Tutor(s):	Dr S Kallestrup aı	nd Dr C Spencer				

AH4794 Joint Dissertation (30cr)						
SCOTCAT Credits:	30	30 SCQF Level 10 Semester: 1 or 2 or Whole Yea				
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8				
Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.					
Planned timetable:	To be arranged.					
student and two appropriate work covered in previous Howork. The topic and range determine that the student has (Guidelines for printing and binttp://www.st-andrews.ac.uk	The dissertation must consist of approximately 6,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)					es not have to relate to tif it builds on previous
Programme module type:	Optional for Art I	History			T	
Pre-requisite(s):	A Letter of Agree	ment	Anti-requisi	ite(s):		n 30 credits in other on / project modules
Learning and teaching	Weekly contact:	As per	Letter of Agre	ement.		
methods and delivery:	Scheduled learni	ng: ho	urs	Guid	led indepen	dent study: hours
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %					
	As used by St Andrews: As per Letter of Agreement.					
Re-Assessment pattern:	As per Letter of Agreement.					
Module Co-ordinator:	As per Letter of Agreement.					

### Art History - Honours Level - 2016/7 - August 2016

# AH4795 Joint Dissertation (60cr) SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules. Planned timetable: To be arranged.

The dissertation must consist of approximately 10,000 - 12,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Art History				
Pre-requisite(s):	A Letter of Agreement.	Anti-requisite(s): Any other dissertat / project module		Any other dissertation / project module	
Learning and teaching	Weekly contact:				
methods and delivery:	ivery: Scheduled learning: hours Guided independent				
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %				
	As used by St Andrews: As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				
Module Co-ordinator:	As per Letter of Agreement.				

### **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**

L3000 Fie	0 Field Course						
SC	OTCAT Credits:	10	SCQF Level 9	Semester:	1		
Ac	ademic year:	2016/7 & 2017/8	2016/7 & 2017/8				
Pla	anned timetable:	1-week residentia Orientation week.		vacation normally	just prior to		
exa and and exp	amine and measure biodion and animal material. Class of alyse large data sets. S	field-based exercises in a range of aquatic and/or terrestrial habitats. Students will biodiversity, ecophysiological adaptation, and community structure, with both plant class exercises are used to develop good sampling techniques and to generate and ets. Students also work in small project groups to develop individual skills in practical manipulations, time-management and personal initiative, and in action of project results.					
Pro	ogramme module type:	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/with Psychology, Biology and Geography, Evolutionary Biology, Sustainable Development.					
Pre	e-requisite(s):	2016/7 - Normally BL2105 or BL2106 2017/8 - BL2300 and (BL2307 or BL2310)					
Со	o-requisite(s):	BL3308 or BL3309		Anti-requisite(s):	BL3321, BL3322		
	arning and teaching	Weekly contact: 6	6-day field course, 8	-hours per day			
me	ethods and delivery:	Scheduled learnin	g: 48 hours	Guided indepen	ident study: 52 hours		
As	ssessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%					
		As used by St Andrews: Coursework = 100%					
Re	e-Assessment pattern:	Resubmission of failed item(s) of coursework					
М	odule Co-ordinator:	Prof D Paterson					
Lec	cturer(s)/Tutor(s):	Prof D Paterson, D	Or A Blight, Dr R Asp	den, Dr Shuker, Dr	J Graves, Dr S Healy		

### Biology - Honours Level - 2016/7 - August 2016

### BL3301 Protein Structure and Function SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: Lectures: 9.00 am Mon, Tue and Wed Practicals: to be arranged.

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.

Programme module type:	Compulsory for Biochemistry, Biomolecular Science, Molecular Biology.			
	Optional for Cell Biology, Behavioural Biology, Biology, Neuroscience, and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	2016/7 - BL2101 or BL2104			
	2017/8 - BL2302 and (BL2306 or BL230	9)		
Required for:	BL4212, BL4215, BL4223			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 x 1-hour lectures (x 11 weeks) and 3 x 6-hour practicals, split over several days, during the semester.			
	Scheduled learning: 51 hours Guided independent study: 149 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 83%, Practical Examinations = 0%, Coursework = 17%			
	As used by St Andrews:			
	3-hour Written Examination = 66%, Co	ursework = 34%		
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%			
Module Co-ordinator:	Dr U Schwarz-Linek			
Lecturer(s)/Tutor(s):	Dr U Schwarz-Linek, Dr J Nairn, Prof T S da Silva	Smith, Dr T Gloster and Dr R Guimaraes		

# BL3302 Gene Regulation SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: Lectures: 10.00 noon Mon, Tue and Wed Practicals: to be arranged.

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.

Programme module type:	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.		
Pre-requisite(s):	2016/7 - Normally BL2104		
	2017/8 - BL2302 and (BL2306 or BL230	99)	
Required for:	BL4223, BL5421		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 81 hours	Guided independent study: 119 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 66%, Practical	Examinations = 0%, Coursework = 34%	
	As used by St Andrews:		
	3-hour Written Examination = 66%, Coursework = 34%		
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%		
Module Co-ordinator:	Dr S MacNeill		
Lecturer(s)/Tutor(s):	Dr P Coote, Dr H Ferreira, Dr S MacNeil White	ll, Dr J Sleeman, Prof M Ryan, Prof M	

### Biology - Honours Level - 2016/7 - August 2016

# BL3303 Membranes and Cell Communication SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: Lectures: 9.00 am Mon, Tue and Wed Practicals: to be arranged.

This module looks at the various ways in which cells communicate with each other. Cell signalling not only involves the creation and reception of signals but also the mechanisms by which signals are transported across biological membranes. We will therefore consider the central role that biological membranes play in the regulation of the movement of molecules between different extracellular, intracellular and transcellular compartments. Also protein sorting and membrane trafficking will be studied. Using various examples of cell communication, the module will discuss both the molecular and the organismal implications of cell signalling. Topics covered include:(i) Lipids; (ii) Protein targeting and sorting; (iii) Membrane trafficking and transport; (iv) Wnt, Notch and Hedgehog signalling; (v) Plant cell signalling; (vi) Hippo signalling (vii) Ubiquitylation and SUMOylation.

Programme module type:	Compulsory for Cell Biology.			
	Optional for Biochemistry, Molecular Biology Biology and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	2016/7 - Normally BL2101			
	2017/8 - BL2301 and (BL2305 or BL230	6 or BL2309)		
Required for:	BL4224, BL5420			
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 54 hours Guided independent study: 146 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%			
	As used by St Andrews:			
	3-hour Written Examination = 66%, Co	ursework = 34%		
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%			
Module Co-ordinator:	Dr M Bischoff			
Lecturer(s)/Tutor(s):	Dr R Ramsay, Dr G Prescott, Dr M Bisch Prof L Torrance, Dr J Tilsner	noff, Prof T Smith, Prof F Gunn-Moore,		

# BL3307 Evolution SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Compulsory for, Marine Biology, Evolutionary Biology.			
	Optional for Ecology and Conservation, Behavioural Biology, Biology, Zoology and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	2016/7 - Normally BL2105 or BL2106			
	2017/8 - BL2303			
Learning and teaching methods and delivery:	Weekly contact: $3 \times 1$ -hour lectures (x 11 weeks) and $1 \times 2$ -hour and $1 \times 3$ -hour practical during the semester.			
	Scheduled learning: 38 hours Guided independent study: 162 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%			
	As used by St Andrews:			
	3-hour Written Examination = 66%, Coursework = 34%			
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%			
Module Co-ordinator:	Prof T Meagher			
Lecturer(s)/Tutor(s):	Prof T Meagher, Dr D Ferrier, Dr N Bail	ey, Prof M Ritchie, Dr M Webster		

### Biology - Honours Level - 2016/7 - August 2016

# BL3308 Aquatic Ecology SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	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.				
Pre-requisite(s):	2016/7 - Normally BL2105 or BL2106 2017/8 - BL2307				
Co-requisite(s):	BL3000	Re	quired for:	BL4301	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 x 1-hour lectures (x 11 weeks) and 1 x 3-day residential field course				
	Scheduled learning: 53 hours		Guided indepen	dent study: 147 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 66%, Practical Examinations = 14%, Coursework = 20%				
	As used by St Andrews: 3-hour Written Examinations = 66%, Coursework = 34%				
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%				
Module Co-ordinator:	Dr I Matthews				
Lecturer(s)/Tutor(s):	Dr I Matthews, Prof C Todd, Dr P Miller, Dr A Blight				

# BL3309 Ecosystems and Conservation SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: Lectures: 10.00 am Mon, Tue and Wed Practicals: to be arranged.

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.

Programme module type:	Compulsory for Ecology and Conservation, Marine Biology, and Behavioural Biology.				
	Optional for Biology, Biology and Geology, Evolutionary Biology, Sustainable Development Zoology and all Biology Joint or Major/Minor Degree programmes.				
Pre-requisite(s):	2016/7 - Normally BL2105 or SD2001				
	2017/8 - BL2307 and (BL2303 or BL2304 or BL2308)				
Co-requisite(s):	BL3000	Re	quired for:	BL4254, BL4266, BL4268	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 x 1-hour lectures (x 11 weeks) and 2 x 3- hour practicals during the semester.				
	Scheduled learning: 39 hours		Guided indeper	ndent study: 161 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%				
	As used by St Andrews:				
	3-hour Written Examination = 66%, Coursework = 34%				
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%				
Module Co-ordinator:	Prof W Cresswell				
Lecturer(s)/Tutor(s):	Prof W Cresswell, Dr S Northridge, Dr I Matthews, Prof T Meagher, Dr A Blight, Dr V Dietrich-Bischoff				

### Biology - Honours Level - 2016/7 - August 2016

# BL3310 Bioenergetics SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: Lectures: 12.00 noon Mon, Tue and Wed Practicals: to be arranged.

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 trasport processes. Chemiosmotic theory and the principles are considered in detail as are the structure and function of electron and proton transfer systems of energy tranducing 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.

Programme module type:	Compulsory for Biochemistry, Biomolecular Science.		
	Optional for Molecular Biology Cell Biology Biology, Neuroscience and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	2016/7 - BL2104		
	2017/8 - BL2302 or BL2306		
Required for:	BL4222		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 x 1-hour lectures (x 11 weeks) and 2 x 6-hour practicals, split over 2 days, and 2 x 3-hour student presentation seminars, during the semester.		
	Scheduled learning: 51 hours	Guided independent study: 149 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
	As used by St Andrews:		
	3-hour Written Examination = 66%, Coursework = 34%		
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%		
Module Co-ordinator:	Dr J Nairn		
Lecturer(s)/Tutor(s):	Dr J Nairn, Dr R Ramsay, Prof P Heathcote, Dr R Guimaraes da Silva, Dr G Prescott, Prof F Gunn-Moore, Dr J Lucocq		

Infection and Disease					
SCOTCAT Credits:	20	SCQF Level 9	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	Lectures: 10.00 ar	Lectures: 10.00 am Mon, Tue and Wed Practicals: to be arranged.			
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.					
Programme module type:	Compulsory for M	olecular Biology.			
	Optional for Biochemistry, Cell Biology, Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.				
Pre-requisite(s):	2016/7 - Normally BL2101 and BL2104				
	2017/8 - BL2301 and BL2309				
Required for:	BL4211, BL4213				
Learning and teaching methods and delivery:		x 1-hour lectures ( cal, split over sever		c 9-hour practicals and semester	
	Scheduled learning	g: 63 hours	Guided indepen	ident study: 137 hours	
Assessment pattern:	As defined by QA. Written Examinati		l Examinations = 09	%, Coursework = 10%	
	As used by St Andrews: 3-hour Written Examination = 66%, Coursework = 34%				
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%				
Module Co-ordinator:	Dr P Coote				
Lecturer(s)/Tutor(s):	Dr P Coote, Prof T Smith, Dr D Jackson, Prof M Ryan, Dr C Adamson, Dr P Kerry, Dr R Randall				

Planned timetable:

## BL3315 Developmental Biology SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8

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.

Lectures: 11.00 am Mon, Tue and Wed Practicals: to be arranged.

Programme module type:	Optional for Neuroscience, Cell Biology, Evolutionary Biology, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	2016/7 - Normally BL2101 or BL2102			
	2017/8 - 2 of (BL2301, BL2302, BL2304	, BL2308)		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 x 1-hour lectures (x11 weeks) and 2 x 15-hour practicals, split over several days, during the semester.			
	Scheduled learning: 63 hours Guided independent study: 137 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 66%, Practical Examinations = 34%, Coursework = 0%			
	As used by St Andrews:			
	3-hour Written Examination = 66%, Coursework = 34%			
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%			
Module Co-ordinator:	Dr D Ferrier			
Lecturer(s)/Tutor(s):	Dr D Ferrier, Dr G Miles, Dr I Somorjai,	Prof C Todd		

## BL3316 Animal Plant Interactions SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: Lectures: 12.00 noon Mon, Tue and Wed Practicals: to be arranged.

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.

Programme module type:	Optional for Behavioural Biology, Ecology and Conservation, Evolutionary Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	2016/7 - Normally BL2102 or BL2106	2016/7 - Normally BL2102 or BL2106		
	2017/8 - BL2304 or BL2307 or BL2310			
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 39 hours	Guided independent study: 161 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 66%, Practical	Examinations = 22%, Coursework = 12%		
	As used by St Andrews:			
	3-hour Written Examination = 66%, Coursework = 34%			
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%			
Module Co-ordinator:	Prof P Willmer			
Lecturer(s)/Tutor(s):	Prof P Willmer, Prof G Ruxton, Dr A Kar	rley, Dr S Healy, Dr G Ballantyne		

## BL3318 Biology of Marine Organisms SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: Lectures: 12 noon Mon, Tue and Wed Practicals: to be arranged.

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 depthrelated 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.

Programme module type:	Compulsory for Behavioural Biology, Ecology and Conservation, Marine Biology.		
	Optional for Evolutionary Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	2016/7 - Normally BL2102 or BL2105		
	2017/8 - 3 of BL2304 or BL2307 or BL23	308 or BL2310	
Required for:	BL4257, BL4259, BL4260, BL4301		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 40 hours	Guided independent study: 160 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 66%, Practical	Examinations = 0%, Coursework = 34%	
	As used by St Andrews:		
	3-hour Written Examination = 66%, Coursework = 34%		
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%		
Module Co-ordinator:	Dr V Smith		
Lecturer(s)/Tutor(s):	Dr V Smith, Prof C Todd, Prof A Brierley Smith, Dr A Blight, Prof P Tyack, Dr L Bo	,, Prof P Hammond, Dr L Rendell, Dr C pehme, Dr B McConnell, Dr D Thompson	

## BL3319 Animal Behaviour: A Quantitative Approach SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	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.			
Pre-requisite(s):	2016/7 - Normally BL2102	Required for: BL4258, BL4263		
	2017/8 - BL2303 or BL2307			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 x 1-hour lectures (x 11 weeks), 3 x 1- hour mini-project group meetings during the semester.			
	Scheduled learning: 36 hours	Guided independent study: 164 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 66%, Practi	cal E	Examinations = 79	%, Coursework = 27%
	As used by St Andrews:			
	3-hour Written Examination = 66%,	Cou	ursework = 34%	
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%			
Module Co-ordinator:	Dr M Webster			
Lecturer(s)/Tutor(s):		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		

## BL3320 Statistical and Quantitative Skills for Biologists SCOTCAT Credits: 10 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Compulsory for all Biology degrees. Optional for Sustainable Development.				
Pre-requisite(s):	2016/7 - 2 from BL2101 - BL2106				
Learning and teaching methods and delivery:	Weekly contact: Varied weekly contact, but to include 1 full-day of lectures in Pre-sessional week (8-hours), plus 2 x 3-hour introductory workshops and 5 x 3-hour practical workshops during the semester				
	Scheduled learning: 29 hours Guided independent study: 71 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%				
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework = 20%				
Re-Assessment pattern:	2-hour Written Examination = 66%, Existing Coursework = 34%				
Module Co-ordinator:	Prof W Cresswell				
Lecturer(s)/Tutor(s):	Prof W Cresswell, Dr G Ruxton, Dr A	Smith, Dr R Ramsay	, Dr J Nairn		

## BL3321 Advanced Critical Analysis Reading Party SCOTCAT Credits: 10 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Optional for Cell Biology, Evolutionary Biology, Neuroscience and all Biology Joint and Major/Minor degree programmes			
Pre-requisite(s):	2016/7 - 2 from BL2101 - BL2106 2017/8 - 4 of (BL2300 - BL2310)	Anti-requisite(s): BL3000, BL3322		
Co-requisite(s):	Any 3000-level BL module			
Learning and teaching	Weekly contact: 5-day residential course, 8-hours per day			
methods and delivery:	Scheduled learning: 40 hours		Guided independent study: 60 hou	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 5%, Coursework = 95%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of coursework			
Module Co-ordinator:	Dr J Sleeman			
Lecturer(s)/Tutor(s):	Prof D Evans, Dr J Sleeman, Prof F G	unr	n-Moore, Dr G Mi	iles, Dr S Pulver

## **BL3322 Basic Biochemistry Laboratory**

SCOTCAT Credits:	10	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	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.

Programme module type - UG Compulsory:	Compulsory for Biochemistry, Molecular Biology single honours degrees and MBiochem intregated masters degree		
Programme module type - UG Optional:	Optional for Cell Biology, Biology and joint honours degrees		
Pre-requisite(s):	2016/7 - BL2101 and BL2104		
	2017/8 - BL2301 or BL2302 or BL2306		
Anti-requisite(s):	BL3000, BL3321		
Learning and teaching	Weekly contact: 5-day laboratory course, 8-hours per day		
methods and delivery:	Scheduled learning: 40 hours Guided independent study: 60 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%	
	As used by St Andrews:		
	1-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	1-hour Written Examination = 66%, Existing Coursework = 34%		
Module Co-ordinator:	Dr R R Ramsay		
Lecturer(s)/Tutor(s):	Dr R R Ramsay, Dr C Adamson, Dr C Bo Randall	tting. Prof M White, Prof M Ryan, Prof R	

## BL3323 Terrestrial Zoology SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 9.00 am Mon, Tue, Wed. Practicals: to be arranged.

This module covers the biology of land animals, including their early evolution, their strategies to cope with unusual terrestrial habitats (extremes of hot, arid and cold, urban life, island life, etc, including climate change effects), and their special problems with reproduction and locomotion. It then looks at insights gained from modern techniques, including molecular, bioinformatics and bar-coding approaches, bio-logging and tracking, and developmental adaptations. It concludes with special topics on particular animals or groups that have improved our understanding of terrestrial peculiarities, whether behavioural, sensory, physiological, mechanical, metabolic or ecological; and of threats to terrestrial diversity for certain groups.

Programme module type:	Compulsory for Zoology Optional for BSc Hons Behavioural Biology, Biology, Evolutionary Biology, Ecology & Conservation and Neuroscience degrees, MBiol degree and all Biology joint honours degrees.		
Pre-requisite(s):	2016/7 - BL2102 or BL2106 2017/8 - BL2304 and BL2308		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 x 1-hour lectures per week; 6-hour practicals (x 2 weeks), and 4 hours of seminars over the semester.		
	Scheduled learning: 49 hours Guided independent study: 151 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 66%, Practical Examinations = 14%, Coursework = 20%		
	As used by St Andrews:		
	3-hour Written Examination = 66%, Coursework = 34%		
Re-Assessment pattern:	3-hour Written Examination = 66%, Existing Coursework = 34%		
Module Co-ordinator:	Prof P G Willmer		
Lecturer(s)/Tutor(s):	Team taught		

## BL3400 Tropical Research and Field Study SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 4 weeks in field locations in summer vacation.

The module allows is for students studying with Operation Wallacea in terrestrial and marine environments for a minimum of four weeks during the summer vacation. Students will gain experience in researching a variety of habitats and investigate the species in locations such as Indonesia, Honduras, South Africa and Mozambique. Students will be introduced to tropical ecology, sustainable development and conservation, fieldwork and novel research methods under the supervision of experts in those research areas. Students will be expected to maintain a journal of their field studies, in addition to being assessed on the application of field techniques and knowledge. The module will culminate in the production of a detailed research proposal.

Programme module type:	Optional for Behavioural Biology, Biology, Ecology and Conservation, Evolutionary Biology, Marine Biology, Zoology, and all Biology or Environmental Biology Joint or Major/Minor Degree programmes. Optional for Sustainable Development.			
Learning and teaching	Weekly contact: Lectures, practicals and occasional seminars.			
methods and delivery:	Scheduled learning: 160 hours Guided independent study: 40			
Assessment pattern:	As defined by QAA: Written Examinations = 20%, Practical Examinations = 10%, Coursework = 70%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	<del>Dr C Peddie</del>			

## BL4200 Literature-based Research Project SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Either BL4200 or PS4050 compulsory for Biology and Psychology.				
Trogramme module type.	BL4200 or BL4201 or PN4299 compulsory for Neuroscience.				
			-		
	Optional for Biology Joint or Major/	IVIIII	or Degree progra	ammes.	
Pre-requisite(s):	Permission of Biology Honours Adviser required				
Learning and teaching methods and delivery:	Weekly contact: 1 dedicated meeting with supervisor per week, students should expect to spend the equivalent of 8 weeks full-time on this research project.				
	Scheduled learning: 22 hours Guided independent study: 278 hours			dent study: 278 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practic	al Exa	aminations = 209	%, Coursework = 80%	
	As used by St Andrews:				
	Coursework = 100% (10% - Thesis outline and resource list 1,000 words 70% - Written thesis 15,000 words 20% - Viva (20 minutes))				
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework				
Module Co-ordinator:	Prof O Gaggiotti				
Lecturer(s)/Tutor(s):	Individual Supervisors across the Sc	hool	l of Biology		

## BL4201 Experimental Research Project SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Optional for all Biology Joint or Major/Minor Degree programmes. May be taken for Biomolecular Science (conditions apply			
Pre-requisite(s):	Permission of Biology Honours Adviser required  Anti-requisite(s): BL4200, PN4299			
Learning and teaching methods and delivery:	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.			
	Scheduled learning: 33 hours Guided independent study: 567 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	Prof O Gaggiotti			
Lecturer(s)/Tutor(s):	Individual Supervisors across the Sc	hool of Biology		

## BL4210 Practical Skills for Molecular Biology and Biochemistry SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Biochemistry, Biomolecular Science, Molecular Biology Optional for Cell Biology and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	Permission of Biology Honours Adviser required			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Occasional seminars and 3 blocks of practicals conducted over several days.			
	Scheduled learning: 35 hours Guided independent study: 115 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%			
	As used by St Andrews:			
	1-hour Written Examination = 30%, Coursework = 70%			
Re-Assessment pattern:	hour Written Examination = 30%, Existing Coursework = 70%			
Module Co-ordinator:	Dr M Nevels			
Lecturer(s)/Tutor(s):	Dr M Nevels, Prof M White			

## **BL4211** Antimicrobials - Modes of Action and Resistance

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SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Biochemistry, Cell Biology, Molecular Biology, Biology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL3311		
Learning and teaching	Weekly contact: 2 x 1-hour seminars ( x 11 weeks).		
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 128 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 20%, Coursework = 30%		
	As used by St Andrews:		
	1-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	1-hour Written Examination = 50%, Existing Coursework = 50%		
Module Co-ordinator:	Dr M Nevels		
Lecturer(s)/Tutor(s):	Dr M Nevels, Prof M White		

## **BL4212 How Enzymes Work**

The Line years				
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Biochemistry, Cell Biology, Molecular Biology, Biology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL3301		
Learning and teaching	Weekly contact: 1 x 2-hour seminars ( x 10 weeks).		
methods and delivery:	Scheduled learning: 20 hours Guided independent study: 130 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
	As used by St Andrews:		
	2-hour Written Examination = 66%, Coursework = 34%		
Re-Assessment pattern:	2-hour Written Examination = 66%, Existing Coursework = 34%		
Module Co-ordinator:	Dr R R Ramsay		
Lecturer(s)/Tutor(s):	Dr R R Ramsay, Prof M White		

## BL4213 Molecular Virology SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology, Biology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL3311		
Learning and teaching	Weekly contact: 2 x 1-hour seminars (x 6 weeks), student debate		
methods and delivery:	Scheduled learning: 15 hours Guided independent study: 135 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 60%, Existing Coursework = 40%		
Module Co-ordinator:	Prof R Randall		
Lecturer(s)/Tutor(s):	Prof R Randall, Dr D Jackson, Dr C Ada	mson, Dr J Tilsner	

## **BL4215 Bacterial Virulence Factors**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

	some important succertar infections.		
Programme module type:	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology Biology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL3301		
Learning and teaching	Weekly contact: 1 x 2-hour lecture (x 4 weeks), 3 x 3-hour student talks		
methods and delivery:	Scheduled learning: 17 hours Guided independent study: 133 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practical Examinations = 30%, Coursework = 30%		
	As used by St Andrews:		
	1.5-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	1.5-hour Written Examination = 40%, Existing Coursework = 60%		
Module Co-ordinator:	Dr U Schwarz-Linek		
Lecturer(s)/Tutor(s):	Dr U Schwarz-Linek		

## **BL4216 Structure-based Drug Discovery**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology Biology and all Biology Joint or Major/Minor Degree programmes.		
	Biology Biology and all Biology Joint of	Major/Millor Degree programmes.	
Pre-requisite(s):	Permission of Biology Honours Adviser	required	
Learning and teaching methods and delivery:	<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).		
	Scheduled learning: 14 hours Guided independent study: 136 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practical Examinations = 40%, Coursework = 20%		
	As used by St Andrews:		
	1.5-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	1.5-hour Written Examination = 40%, Existing Coursework = 60%		
Module Co-ordinator:	Dr J Nairn		
Lecturer(s)/Tutor(s):	Dr T Gloster, Prof G Taylor, Dr J Nairn		

## BL4222 Metabolic and Clinical Biochemistry

SCOTCAT Credits: 15 SCQF Level 10 Semester: 1

Academic year: 2016/7 & 2017/8

Planned timetable: To be arranged.

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.

Programme module type:	Optional for Biochemistry, Biomolecular Science, and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	Permission of Biology Honours Adviser required			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 x 1-hour seminars (x 10 weeks), 1 x 3-hour students presentations for 1 week			
	Scheduled learning: 23 hours Guided independent study: 127 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 40%, Practical Examinations = 30%, Coursework = 30%			
	As used by St Andrews:			
	3-hour Written Examination = 40%, Coursework = 60%			
Re-Assessment pattern:	3-hour Written Examination = 40%, Existing Coursework = 60%			
Module Co-ordinator:	Dr G Prescott			
Lecturer(s)/Tutor(s):	Dr G Prescott, Dr R Ramsay and invite	d NHS staff		

## **BL4223 Eukaryotic Chromosome Replication and Genome Stability**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

Highly-efficiently chromosomal DNA replication is essential for all forms of cellular life 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 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.

Programme module type:	Optional for Biochemistry, Biomolecular Science, Cell Biology, Molecular Biology, and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Normally BL3301 and BL3302		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11 weeks)		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Co	ursework = 40%	
Re-Assessment pattern:	3-hour Written Examination = 60%, Existing Coursework = 40%		
Module Co-ordinator:	Dr S A MacNeill		
Lecturer(s)/Tutor(s):	Dr S A MacNeill		

## **BL4224 Molecular Mechanisms of Membrane Trafficking**

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	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
	Academic year:	2016/7 & 2017/8				
Planned timetable: 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.

Programme module type:	Optional for Biochemistry, Cell Biology, Molecular Biology, Neuroscience and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL3303		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11 weeks)		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 25%, Practical Examinations = 20%, Coursework = 55%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Co	oursework = 50%	
Re-Assessment pattern:	2-hour Written Examination = 50%, Existing Coursework = 50%		
Module Co-ordinator:	Dr G Prescott		
Lecturer(s)/Tutor(s):	Dr G Prescott, Dr J Tilsner		

## **BL4232 Neuroethology**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

Neuroethology is the study of the neural control of natural animal behaviour from a comparative biological perspective. In this module we focus mainly on behaviours arising from the interactions between predators and their prey. Predators and 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.

Programme module type:	Optional for Behavioural Biology, Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL2101 (or equivalent)		
Learning and teaching	Weekly contact: 1 x 2-hour seminar	(x 11 weeks)	
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practica	al Examinations = 0%, Coursework = 50%	
	As used by St Andrews:		
	2-hour Written Examination = 50%, C	Coursework = 50%	
Re-Assessment pattern:	2-hour Written Examination = 50%, Existing Coursework = 50%		
Module Co-ordinator:	Dr W J Heitler		
Lecturer(s)/Tutor(s):	Dr W Heitler, Prof K Sillar		

## BL4248 Human Physiology of Diving SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2017/8 Planned timetable: To be arranged.

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.

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. There are additional costs attached to this module which the student will be expected to meet.

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Programme module type:	Optional for Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11 weeks).		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%  As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60%  2-hour Written Examination = 40%, Existing Coursework = 60%  Dr C Peddie  Dr C Peddie, Dr G Prescott		
Re-Assessment pattern:			
Module Co-ordinator:			
Lecturer(s)/Tutor(s):			

## BL4249 Scientific Diving SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: subject to availability Planned timetable: Full Time 2-3 weeks in March/April

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. There are additional costs attached to this module which the student will be expected to meet.

Programme module type:	Optional for Ecology and Conservation, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL4251, PADI Advanced Open Water Diver or BSAC Sports Diver (or equivalent)		
Learning and teaching	Weekly contact: 8 hours per day for 2 weeks.		
methods and delivery:	Scheduled learning: 96 hours	Guided independent study: 54 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical E	xaminations = 45%, Coursework = 55%	
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Dr C Peddie		
Lecturer(s)/Tutor(s):	Dr C Peddie, Dr S Whiten		

## BL4251 Tropical Marine Biology SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 2017/8 1

To be arranged.

Planned timetable:

The goal of this module is to examine the ecological and biological principles underpinning the major tropical marine ecosystems. The module provides an understanding of the ecological processes that control tropical marine ecosystems, and considers the organisms that are characteristic of each. All the major tropical marine habitats will be considered, but with a focus on coral reef, seagrass and mangrove ecosystems. The module also tackles topical research areas on the subject through student-led seminars, which will vary depending on the latest scientific research and the specific interests of participants.

On completion of the module, students will have an understanding of coral reef, mangrove and seagrass ecology. They will understand the biology and physiology of corals and be able to identify the major phyla associated with tropical marine ecosystems. The module will also provide an understanding of the threats to tropical marine habitats, current research trends on tropical marine systems, and the scientific approaches and techniques used tackle scientific questions relating to tropical marine biology.

Programme module type:	Optional for Ecology and Conservation, Evolutionary Biology, Marine Biology, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.  Optional for Sustainable Development.		
Required for:	BL4249 - unless other pre-requisite(s) for that module held.		
Learning and teaching	Weekly contact: Lectures and seminars.		
methods and delivery:	Scheduled learning: 21 hours	Guided independent study: 129 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical E	xaminations = 50%, Coursework = 50%	
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Dr C Peddie		

BL4254 Fisheries Research						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:		2016/7 & 2017/8				
	Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for Ecology and Conservation, Marine Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes		
Pre-requisite(s):	BL3309		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11 weeks)		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 45%, Coursework = 25%  As used by St Andrews: 1.5-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	1.5-hour Written Examination = 30%, Existing Coursework = 70%		
Module Co-ordinator:	Dr C Paxton		
Lecturer(s)/Tutor(s):	Dr C Paxton		

## **BL4255 Marine and Environmental Biotechnology**

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	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
	Academic year:	2016/7 & 2017/8				
Planned timetable: To be arranged.						

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 microorganisms), 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.

Programme module type:	Optional for Biochemistry, Ecology and Conservation, Marine Biology, Molecular Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	Permission of Biology Honours Adviser required			
Learning and teaching	aching Weekly contact: 1 x 2-hour seminar (x 11 weeks)			
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 40%, Practical	Examinations = 30%, Coursework = 30%		
	As used by St Andrews:			
	Written Examination = 40% (open book essay), Practical Examinations = 30%, Coursework = 30%			
Re-Assessment pattern:	Written Examination = 40%, Existing Co	oursework = 60%		
Module Co-ordinator:	Dr V J Smith			
Lecturer(s)/Tutor(s):	Dr V J Smith	Dr V J Smith		

## **BL4256 Marine Bioacoustics**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Optional for Behavioural Biology, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
Pre-requisite(s):	Permission of Biology Honours Adviser required			
Learning and teaching methods and delivery:	<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			
	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 75%, Practical Examinations = 25%, Coursework = 0%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Co	ursework = 50%		
Re-Assessment pattern:	2-hour Written Examination = 50%, Existing Coursework = 50%			
Module Co-ordinator:	Prof P Tyack			
Lecturer(s)/Tutor(s):	Prof P Tyack, Prof V Janik			

## **BL4258 Foraging in Marine Mammals**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Optional for Behavioural Biology, Ecology and Conservation, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	BL3319	BL3319		
Learning and teaching methods and delivery:	<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)			
	Scheduled learning: 26 hours Guided independent study: 124 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 40%, Cour	rsework = 60%		
Re-Assessment pattern:	2-hour Written Examination = 40%, Existing Coursework = 60%			
Module Co-ordinator:	Dr P Miller			
Lecturer(s)/Tutor(s):	Dr P Miller, Dr S Smout, Dr D Thompson			

### **BL4259 Marine Mammals and Man**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Ecology and Conservation, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
Pre-requisite(s):	BL3318			
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 36 hours Guided independent study: 114 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	Prof P S Hammond			
Lecturer(s)/Tutor(s):	Prof P S Hammond, Dr S Northridge, Dr A	A Hall, Dr Gordon		

## **BL4260 Biological Oceanography**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Ecology and Conservation, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
Pre-requisite(s):	BL3318			
Learning and teaching	Weekly contact: 10 x 2-hour seminars (x	6 weeks)		
methods and delivery:	Scheduled learning: 20 hours Guided independent study: 130 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 40%, Cour	rsework = 60%		
Re-Assessment pattern:	2-hour Written Examination = 40%, Existing Coursework = 60%			
Module Co-ordinator:	Dr P Miller			
Lecturer(s)/Tutor(s):	Dr P Miller			

## **BL4262 Physical Oceanography**

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SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				

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.

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Programme module type:	Optional for Ecology and Conservation, Marine Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching	Weekly contact: 2 x 2-hour seminar or le	ecture (x 5 weeks)	
methods and delivery:	Scheduled learning: 20 hours Guided independent study: 130 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 40%, Coursework = 0%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Cour	rsework = 40%	
Re-Assessment pattern:	2-hour Written Examination = 60%, Exist	ing Coursework = 40%	
Module Co-ordinator:	Dr L Boehme		
Lecturer(s)/Tutor(s):	Dr L Boehme		

## **BL4263 The Question of Culture in Cetaceans**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Behavioural Biology, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes		
Pre-requisite(s):	BL3319		
Learning and teaching	Weekly contact: 10 x 2-hour seminars over 6 weeks  Scheduled learning: 20 hours  Guided independent study: 130 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practical Examinations = 10%, Coursework = 50%		
	As used by St Andrews:		
	1.5-hour Written Examination = 40%, C	oursework = 60%	
Re-Assessment pattern:	1.5-hour Written Examination = 40%, Existing Coursework = 60%		
Module Co-ordinator:	Dr L Rendell		
Lecturer(s)/Tutor(s):	Dr L Rendell		

## **BL4266 Conservation Research Methods**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

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Programme module type:	Optional for Ecology and Conservation, Marine Biology, Sustainable Development, Zoology, and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	BL3309			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Variable combination of lectures, field practicals, data collection in the field and analysis workshops per week for 11 weeks			
	Scheduled learning: 40 hours Guided independent study: 110 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	Prof W Cresswell	* *		
Lecturer(s)/Tutor(s):	Prof W Cresswell			

## BL4268 Scientific Communication in Biodiversity and Conservation SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Optional for Ecology and Conservation, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL3309		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour seminar (x 11 weeks) plus 6 additional 2-hour lectures during the sememster		
	Scheduled learning: 34 hours Guided independent study: 116 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 40%, Coursework = 60%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Dr M Dornelas		
Lecturer(s)/Tutor(s):	Dr M Dornelas		

## **BL4270 Plant-environment Interactions**

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SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Optional for Cell Biology, Ecology and Conservation, Sustainable Development and all Biology Joint or Major/Minor Degree programmes.			
Pre-requisite(s):	Permission of Biology Honours Adviser required			
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11 weeks), plus 1 x additional seminar  Scheduled learning: 24 hours  Guided independent study: 126 hours			
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 34%, Coursework = 66%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	Dr J Jones			
Lecturer(s)/Tutor(s):	Dr J Jones	Dr J Jones		

## BL4273 Bioinformatics for Biologists SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2017/8 Planned timetable: 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.

Programme module type:	Optional for Biochemistry, Cell Biology, Evolutionary Biology, Marine Biology, Molecular Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
Pre-requisite(s):	Normally BL3320	Normally BL3320		
Learning and teaching methods and delivery:	<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			
	Scheduled learning: 23 hours Guided independent study: 127 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 50%, Existing Coursework = 50%			
Module Co-ordinator:	TBC			

## **BL4274 Evolutionary Developmental Biology**

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SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Cell Biology, Evolutionary Biology, Marine Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching	Weekly contact: 1 x 2-hour seminar	( x 11 weeks).	
methods and delivery:	ivery: Scheduled learning: 22 hours Guided independent study		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50% As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Dr D Ferrier		
Lecturer(s)/Tutor(s):	Dr D Ferrier, Dr I Somorjai		

### **BL4275 Evolution in Action**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

public understanding of science.			
Programme module type:	Optional for Cell Biology, Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour seminar (x 11 weeks) plus an additional 2 x 2-hour seminars.		
	Scheduled learning: 26 hours Guided independent study: 124 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Exa	aminations = 20%, Coursework = 80%	
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Prof T R Meagher		
Lecturer(s)/Tutor(s):	Prof T R Meagher		

## **BL4278 Biology of Dinosaurs and Other Extinct Vertebrates**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11 weeks).		
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 128 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 35%, Coursework = 15%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	2-hour Written Examination = 50%, Existing Coursework = 50%		
Module Co-ordinator:	Prof G Ruxton		
Lecturer(s)/Tutor(s):	Prof G Ruxton		

### **BL4280 Evolution and Human Behaviour**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Behavioural Biology , Evolutionary Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11 weeks).  Scheduled learning: 22 hours  Guided independent study: 128 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%		
	As used by St Andrews:		
	1.5-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	hour Written Examination = 40%, Existing Coursework = 60%		
Module Co-ordinator:	Dr M Webster		
Lecturer(s)/Tutor(s):	Dr M Webster. Dr K Cross, Dr L Dean, Dr	C Evans, Dr A Navarrete	

## **BL4281 Animal Communication and Cognition**

Annual Communication and Cognition					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for Behavioural Biology, Marine Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 1	1 weeks).	
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 128 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 30%, Coursework = 20%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	2-hour Written Examination = 50%, Existing Coursework = 50%		
Module Co-ordinator:	Prof V Janik		
Lecturer(s)/Tutor(s):	Prof V Janik, Dr T Gotz		

## **BL4282 Biology and Behaviour of Social Insects**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Behavioural Biology, Ecology and Conservation, Evolutionary Biology, Sustainable Development, Zoology and all Biology Biology Joint or Major/Minor Degree programmes.		
Learning and teaching	Weekly contact: 1 x 3-hour seminar (x 11 weeks).		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Prof P Willmer		
Lecturer(s)/Tutor(s):	Prof P Willmer, Dr A Gardner, Dr G Ba	allantyne	

BL4284 Breeding Systems and Sexual Conflict					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	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.

Programme module type:	Optional for Behavioural Biology, Evolutionary Biology, Sustainable Development, Zoology and all Biology or Environmental Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x	11 weeks)	
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 128 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Dr C Smith		
Lecturer(s)/Tutor(s):	Dr C Smith, Dr J Graves, Prof T R Meag	her, Prof M Ritchie	

BL4285 Complex Systems in Animal Behaviour					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	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.

Programme module type:	Optional for Ecology and Conservation, Behavioural Biology, Sustainable Development, Zoology and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	Permission of Biology Honours Adviser required		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 14 x 1-hour seminars plus 4 x 2-hour computer-based practical classes over 8 weeks		
	Scheduled learning: 22 hours Guided independent study: 128 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 25%, Practical Examinations = 0%, Coursework = 75%		
	As used by St Andrews:		
	2-hour Written Examination = 25%, Coursework = 75%		
Re-Assessment pattern:	2-hour Written Examination = 25%, Existing Coursework = 75%		
Module Co-ordinator:	Dr V A Smith		
Lecturer(s)/Tutor(s):	Dr V A Smith		

## BL4286 Advanced Topics in Evolution SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Optional for Behavioural Biology, Ecology and Conservation, Evolutionary Biology, Marine Biology, Zoology and all Biology Joint or Major/Minor Degree programmes			
Learning and teaching	Weekly contact: 1 x 2-hour seminar (x 11	1 weeks).		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 50%, Coursework = 0%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 50%, Existing Coursework = 50%			
Module Co-ordinator:	Prof M Ritchie			
Lecturer(s)/Tutor(s):	Dr N Bailey, Prof M Ritchie	Dr N Bailey, Prof M Ritchie		

## BL4301 Polar Ecology: A field course in Antarctica SCOTCAT Credits: 15 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Planned timetable: To be arranged.

This module will provide a theoretical and practical introduction to the marine ecology of Antarctica with emphasis on marine top predators (sea birds and marine mammals), 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 of whales, seals and sea birds 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, 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.

Participating students will need to cover all logistic expenses via payment of a substantial expedition fee.

Programme module type:	Optional for Ecology and Conservation, Marine Biology, Sustainable Development and all Biology Joint or Major/Minor Degree programmes.		
Pre-requisite(s):	BL2105, BL3308, BL3318 or equivalent preferred but not essential; Medical certificate documenting fit for travel to remote Antarctica		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2.5-week field trip involving extensive travel and 100 hours of contact time on the ship		
	Scheduled learning: 100 hours	Guided independent study: 50 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Dr S Heinrich		
Lecturer(s)/Tutor(s):	Dr S Heinrich, Dr L Boehme		

BL4601 Research Project Development and Methodology					
	SCOTCAT Credits:	20	SCQF Level 10	Semester:	Whole Year
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	Available only to students on the MBiochem, MBiol and MMarBiol degree programmes			
	Planned timetable:	Distance learning o	luring External Place	ment	_

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 the biosciences, 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.

Programme module type:	Compulsory for the MBiochem, MBiol, MMarBiol.	
Pre-requisite(s):	Approved entry on to the MBiochem, MBiol or MMarBiol degree programmes	
Required for:	BL5410	
Learning and teaching This is a Study Abroad or Work Placement module.		
methods and delivery:	Weekly contact: 1 tutorial each week for 5 weeks.	
Assessment pattern:	As defined by QAA:	
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews:	
Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework	
Module Co-ordinator:	Dr J Nairn	
Lecturer(s)/Tutor(s):	Dr J Nairn, Dr G Prescott, Dr A Smith, Prof M Ryan, Dr U Schwarz-Linek	

# BL4602 External Research Placement SCOTCAT Credits: 100 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students on the MBiochem, MBiol and MMarBiol degree programmes Planned timetable: External placement

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.

Programme module type:	Compulsory for the MBiochem, MBiol and MMarBiol degree programmes	
Pre-requisite(s):	Approved entry on to the MBiochem, MBiol or MMarBiol degree programmes	
Required for:	BL5410	
Learning and teaching methods and delivery:	This is a Study Abroad or Work Placement module.  Weekly contact: External Placement	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%	
	As used by St Andrews:	
	Coursework = 100%	
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework	
Module Co-ordinator:	Dr J Nairn	
Lecturer(s)/Tutor(s):	Individual Supervisors across the School of Biology	

## BL5410 Advanced Topics in Biomolecular Sciences SCOTCAT Credits: 30 SCQF Level 11 Semester: Whole Year Academic year: 2016/7 & 2017/8 Planned timetable: Weeks 1-3: 2 x 2-hour seminars per week, Weeks 3-11: 7 x 1.5-hour School of

This module will allow you to develop in-depth knowledge of research that is at the forefront of modern biomolecular sciences. You will hear about and discuss current research taking place within the School of Biology through tailored seminars and by attending the School seminar series. You will then have the opportunity to study one of these areas in depth as you write a review article on the subject area. You will then consider how to develop your research area into a funding application and into an industrial business plan. Your learning throughout the module will be supported by 1:1 tutorials that will guide the development of your review article and research proposals.

Weeks 1-3: 2 x 2-hour seminars per week, Weeks 3-11: 7 x 1.5-hour School of Biology seminars and discussion plus 2 x 1-hour tutorials over the 9-weeks

Programme module type:	Compulsory for MBiochem programme		
Pre-requisite(s):	BL4601 and BL4602		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 x 2-hour seminars (x 7 weeks), 1-hour tutorial (x 7 week), 1.5-hour seminar/discussion session (x 22 weeks)		
	Scheduled learning: 68 hours	Guided independent study: 232 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework		
Module Co-ordinator:	Dr J Tilsner (Semester 1) and Dr R Guimaraes da Silva (Semester 2)		
Lecturer(s)/Tutor(s):	Team taught		

## BL5420 Advanced Microscopy and Image Analysis – Seeing is Believing SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Optional for the MBiochem. Optional for Biochemistry, Cell Biology and Molecular Biology BSc (Hons) Degree programmes.		
Pre-requisite(s):	BL3303 and/or BL3315		
Learning and teaching	Weekly contact: 1 x 2-hour seminar.		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 20%, Practical Examinations = 30%, Coursework = 50%		
	As used by St Andrews:		
	1.5-hour Written Examination = 20%, Coursework = 80%		
Re-Assessment pattern:	1.5-hour Written Examination = 20%, Existing Coursework = 80%		
Module Co-ordinator:	Dr M Bischoff		
Lecturer(s)/Tutor(s):	Dr M Bischoff, Prof F Gunn-Moore, Dr J Sleeman		

# BL5421 Chromatin and Genome Stability SCOTCAT Credits: 15 SCQF Level 11 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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, Caenorhabditis elegans and Drosophila melanogaster. 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.

Programme module type:	Optional for the MBiochem.  Optional for Biochemistry, Cell Biology and Molecular Biology BSc (Hons) Degree programmes.				
Pre-requisite(s):	BL3302				
Learning and teaching	Weekly contact: 1 x 2-hour seminar.				
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 128 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 20%, Practical Examinations = 25%, Coursework = 55%				
	As used by St Andrews:				
	1.5-hour Written Examination = 20%, Coursework = 80%				
Re-Assessment pattern:	1.5-hour Written Examination = 20%, Existing Coursework = 80%				
Module Co-ordinator:	Dr H Ferreira				
Lecturer(s)/Tutor(s):	Dr H Ferreira				

BL5440 Major Review Paper in Evolutionary Biology						
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:					

Students will prepare a major review paper, reviewing a current topic in evolutionary biology. Extensive one-to-one work with staff will afford students the opportunity to produce a highly polished article. The paper will be submitted for peer (classmate) review, and will receive editorial guidance on changes from staff before a final version is submitted.

Programme module type:	Optional for all Biology degrees			
Pre-requisite(s):	BL2105 and BL3307, possible exceptions on discretion of instructors			
Learning and teaching	Weekly contact: 2-hour seminar (x 5 weeks), 1-hour tutorial (week 3,4,6)			
methods and delivery:	Scheduled learning: 13 hours Guided independent study: 137 hour			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	Dr M Morrissey			
Lecturer(s)/Tutor(s):	Dr M Morrissey, Dr A Gardner, Prof O Gaggiotti			

### Biology - Honours Level - 2016/7 - August 2016

# BL5441 Animal Cognition SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 To be arranged. To be arranged.

In this module we will investigate the cognitive abilities of animals, with particular interest in understanding the adaptive value of those abilities. This means that although we will develop an understanding of animal cognition based on standard animal models (typically rats and pigeons), we will extend those principles to addressing cognitive abilities in 'real' animals behaving in the 'real' world. We will use Shettleworth's book, already the key animal cognition text, as our starting point with student-led seminars providing breadth by presenting examples from the recent burgeoning of literature on non-model animals. The result will be a stimulating opportunity to develop a critical understanding of how animals perceive their world, how their cognitive abilities are shaped by that world and how those abilities lead to reproductive success.

Programme module type:	Optional for Biology, Behavioural Biology, Biology & Psychology, Ecology & Conservation, Environmental Science (& assoc'd), Evolutionary Biology, Marine Biology, and Zoology Honours Programmes.			
Pre-requisite(s):	BL3319			
Learning and teaching	Weekly contact: 3-hour seminar (x 10 weeks), 3-hour lecture (x 1 week)			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 127 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 50%, Coursework = 0%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Presentation = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr S Healy			
Lecturer(s)/Tutor(s):	Dr S Healy			

# BL5442 Advanced Biological Statistics SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

The purpose of the module is to give students an appreciation of recent developments in statistical analysis and to provide them with a strategy for approaching a data analysis. The module will introduce the concept of the "new" statistics and will highlight recent developments in statistics and the common problems associated with the analysis of ecological and evolutionary data. Data exploration will be discussed and alternative approaches to model selection will be considered. Consideration will be given to GLMs, GLMMs, GAMs and GAMMs and the analysis of count data and zero-inflated data will be considered. The concept of Bayesian inference will be introduced, including MCMC estimation methods, and a detailed consideration of its application in ecology presented. The module will include guidance on understanding and interpreting reported statistics through the use of specific case studies.

Programme module type:	Optional for Biology, Ecology & Conservation, Environmental Science (& assoc'd), Evolutionary Biology, Marine Biology, and Zoology BSc Honours Programmes and MBiol and MMarBiol Integrated Masters programmes.			
Pre-requisite(s):	BL3320			
Learning and teaching				
methods and delivery:				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	Dr C Smith			
Lecturer(s)/Tutor(s):	Dr C Smith, Dr R Spence			

### Biology - Honours Level - 2016/7 - August 2016

Planned timetable:

# BL5499 Advanced Laboratory Research Project SCOTCAT Credits: 60 SCQF Level 11 Semester: Whole Year Academic year: 2016/7 & 2017/8

variable, as needed

This project will involve extensive and advanced laboratory work to investigate a defined problem within biochemistry, appropriate to the MBiochem 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.

Programme module type:	Compulsory for MBiochem			
Pre-requisite(s):	BL4601 and BL4602			
Learning and teaching				
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Resubmission of failed item(s) of Coursework			
Module Co-ordinator:	Dr C Adamson			
Lecturer(s)/Tutor(s):	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						
	SCOTCAT Credits:	10	SCQF Level 9	Semester:	Whole Year		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	To be arranged.	To be arranged.				
	and their application to in	o provide a basis in organic spectroscopy, molecular symmetry and point groups norganic spectroscopy, and crystallography and X-ray diffraction. In addition, e in chemical information retrieval and searching on-line databases.					
	Programme module type:	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					
	Pre-requisite(s):	Passes in at least t	Passes in at least two of CH2501, (CH2601 or CH2603) and CH2701				
	Learning and teaching methods and delivery:	<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.					
		Scheduled learning	g: 50 hours	Guided indepen	ndent study: 50 hours		
	Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 100%, Coursework = 0%					
		As used by St Andrews: 5 x 1-hour Practical Examinations = 100%					
	Re-Assessment pattern:	Oral Re-assessme	nt = 100%				
	Module Co-ordinator:	Dr R A Aitken					
	Lecturer(s)/Tutor(s):	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					

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

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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.				
120 hours				
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Dr M L Clarke

A selection of the Academic Staff

Organometallic Chemis	try				
SCOTCAT Credits:	10	SCQF Level 9	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				
This module offers a system fundamental concepts and hapto nomenclature and 18 ligands; static and dynam homogeneous catalytic cycle	the principal functi -electron rule; syntl ic structures; reac	onal groups of organesis of complexes of	nometallic chemis of CO, alkyl, alkene	try. Topics include: the alkyne and carbocyclic	
Programme module type:	Compulsory for Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement, Chemistry and Physics.				
	Optional for Chemical Sciences, Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.				
Pre-requisite(s):	Passes in CH2501	and at least one of	(CH2601 or CH260	3) and CH2701	
Learning and teaching methods and delivery:	Weekly contact: 1 tutorials in total.	3 lectures per we	ek over 5 - 7 week	s (Weeks 1-7) and 2 - 3	
	Scheduled learning	g: 17 hours	Guided indeper	ndent study: 83 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St And 2-hour Written Ex				
Re-Assessment pattern:	Oral Re-assessme	nt = 100%			
Module Co-ordinator:	Prof P C J Kamer				
Lecturer(s)/Tutor(s):	Prof P C J Kamer,	·ha			

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SCOTCAT Credits:	10	SCQF Level 9	Semester:	2		
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8				
Planned timetable:	To be arranged.					
This module brings together defects, semiconductor ban the understanding of many a	d theory and prope	rties, phase equil				
Programme module type:	Compulsory for Chemistry and Geology, Materials Chemistry, Materials Chemistry with External Placement. Optional for Chemical Sciences.					
Pre-requisite(s):	Passes in CH2501 and at least one of (CH2601 or CH2603) and CH2701					
Required for:	CH5716					
Learning and teaching methods and delivery:	Weekly contact: 1 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.					
	Scheduled learning	ng: 17 hours	Guided indep	endent study: 83 hours		
Assessment pattern:	As defined by QA Written Examinat		tical Examinations	= 0%, Coursework = 0%		
	As used by St Andrews: 2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessment = 100%					
Module Co-ordinator:	Dr P A Connor					
Lecturer(s)/Tutor(s):	Dr P A Connor, Dr R T Baker					

SCOTCAT Credits:	10	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8				
Planned timetable:	To be arranged.					
This module aims to develop inorganic compounds. The n centres and how they ope catalysis. A second major co multinuclear NMR and EPR,	naterial will include erate in complex s mponent of the mo	studies of the diff ystems such as rodule will cover the	erent types of read metal-containing of e use of spectrosco	ctions that occur at met lrugs and homogeneou pic techniques, includir		
Programme module type:	Compulsory for Chemistry, 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.  Optional for Chemical Sciences, Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.					
Pre-requisite(s):	Passes in CH2501	and at least one o	f (CH2601 or CH26	03) and CH2701		
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials	•	veek over 9 - 10 we	eks within Weeks 1 - 12		
	Scheduled learning	ng: 18 hours	Guided indep	endent study: 82 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St And 2-hour Written Ex	lrews: camination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%					
Module Co-ordinator:	Dr B E Bode					
Lecturer(s)/Tutor(s):	Dr B E Bode, Dr E Zysman-Colman					

Inorganic Chemistry Lal	boratory					
SCOTCAT Credits:	10	SCQF Level 9	Semester:	2		
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8				
Planned timetable:	9.00 am - 12.00 no	oon or 1.00 pm Mo	n to Fri (Weeks 1 - 6	5)		
This module comprises pra inorganic chemistry.	actical experiments	involving synthesis	s, characterisation	and measurements in		
Programme module type:	Compulsory for Chemical Sciences, Chemistry, Chemistry and Geology, Chemistry with Medicinal Chemistry, Materials Chemistry M.Chem., 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					
Pre-requisite(s):	Passes in CH2501 and at least one of (CH2601 or CH2603) and CH2701					
Learning and teaching methods and delivery:	Weekly contact: [	Daily 3- or 4-hour m	orning practical cla	sses (Weeks 1 - 6).		
•	Scheduled learning: 90 hours Guided independent study: 1					
Assessment pattern:	As defined by QA Written Examinat		Examinations = 0%	, Coursework = 100%		
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	No Re-Assessmen	t available, requires	lab attendance to	complete coursework		
Module Co-ordinator:	Dr P Kilian					
Lecturer(s)/Tutor(s):	Dr P Kilian, Dr E Zysman-Colman, Dr A Stasch, Prof P Kamer					

SCOTCAT Credits:	10	SCQF Level 9	Semester:	2	
Academic year:	2016/7 & 2017/8		-		
Planned timetable:	To be arranged.				
This module will cover a wide of complex molecules. Studies sulfur, phosphorus, boron, so modern methods of alker of the protecting groups in complex states.	dents will gain a d silicon, organolithiu ne, alkyne and biary	eep understanding m and organozinc yl synthesis using p	g of the importar reagents. Studen palladium and ruth	nce of methods involvin ts will also be introduce nenium catalysts. The us	
Programme module type:	Compulsory for Chemical Sciences, Chemistry, Chemistry and Geology, Chemistry with Medicinal Chemistry, Chemistry with External Placement, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry an External Placement. Optional for Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics				
Pre-requisite(s):	Passes in (CH2601 or CH2603) and at least one of CH2501 and CH2701				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.				
	Scheduled learning	ng: 17 hours	Guided indep	endent study: 83 hours	
Assessment pattern:	t pattern:  As defined by QAA:  Written Examinations = 100%, Practical Examinations = 0%, Coursework =				
	As used by St Andrews:				
	2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessme	nt = 100%			
Module Co-ordinator:	Prof N J Westwood				
Lecturer(s)/Tutor(s):	Prof N J Westwoo	d Da M.L. Claulta			

# CH3613 Carbohydrate and Nucleic Acid Chemistry SCOTCAT Credits: 10 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Biomolecular Science, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement.  Optional for Chemical Sciences.				
Pre-requisite(s):	Passes in (CH2601 or CH2603) and at least one of CH2501 and CH2701				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.				
	Scheduled learning: 17 hours Guided independent study: 83 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%				
Module Co-ordinator:	Dr G J Florence				
Lecturer(s)/Tutor(s):	Dr G J Florence, Dr E R Kay				

# CH3615 Mechanism in Organic Chemistry SCOTCAT Credits: 10 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

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Programme module type:	Compulsory for Biomolecular Science, 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.  Optional for Chemical Sciences, Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics, Materials Chemistry MChem				
Pre-requisite(s):	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				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 - 3 lectures per week over 9 - 10 weeks within Weeks 1-11 and 2 - 3 tutorials in total.				
	Scheduled learning: 17 hours	Guided independent study: 83 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%				
Module Co-ordinator:	Prof D Philp				
Lecturer(s)/Tutor(s):	Prof D Philp, Prof A D Smith				

SCOTCAT Credits:	10	SCQF Level 9	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	9.00 am - 12.00 no	oon or 1.00 pm Mo	on to Fri (Weeks 1-5)	)	
Practical experiments involv	ing synthesis, chara	cterisation and me	easurements in orga	nic chemistry.	
Programme module type:	Compulsory for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry, Chemistry with External Placement, 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, Materials Chemistry M.Chem.				
Pre-requisite(s):	Passes in (CH1601 or CH1202) and at least two of CH2501, (CH2601 or CH2603), CH2701		Anti-requisite(s):	CH3622	
Learning and teaching methods and delivery:	Weekly contact: Daily 3- or 4-hour morning practical classes over 5 weeks (Weeks 1-5).				
	Scheduled learning	ng: 90 hours	Guided indepen	ident study: 10 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 10				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	No Re-Assessmen	t available, require	es lab attendance to	complete coursework	
Module Co-ordinator:	Dr I A Smellie, Dr I	N S Keddie			
Lecturer(s)/Tutor(s):	Dr I A Smellie, Dr I	N S Keddie. Dr R J I	M Goss		

Organic Chemistry Labo	ratory (Materia	ls)			
SCOTCAT Credits:	10	SCQF Level 9	9	Semester:	1
Academic year:	2016/7 & 2017/8				
Planned timetable:	9.00 am - 12.00 no	oon or 1.00 pm M	lon 1	to Fri (Weeks 1-5)	
Practical experiments involve particular emphasis on orgaby CH3621 students in addit	nic materials. Stud	ents will perform	a s	election of the ex	
Programme module type:	Compulsory for Materials Chemistry, Materials Chemistry with External Placement.				
Pre-requisite(s):	Passes in (CH2601 or CH2603) and at least one of CH2501 and CH2701		Ar	nti-requisite(s):	CH3621
Learning and teaching methods and delivery:	Weekly contact: [ (Weeks 1-5).	Daily 3- or 4-hour	mor	ning practical cla	sses over 5 weeks
	Scheduled learning	ng: 90 hours		Guided indepen	dent study: 10 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	No Re-Assessment available, requires lab attendance to complete coursework				
Module Co-ordinator:	Dr I A Smellie, Dr I	N S Keddie			
Lecturer(s)/Tutor(s):	Dr I A Smellie, Dr I	N S Keddie, Dr R J	М	Goss	

# CH3712 Quantum Theory of Atoms, Molecules and Solids SCOTCAT Credits: 10 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Chemistry, Materials Chemistry, Chemistry with External Placement, Chemistry and Physics, Materials Chemistry with External Placement. Optional for Chemical Sciences, Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.				
Pre-requisite(s):	Passes in CH2701 and at least one of CH2	2501 and (CH2601 or CH2603)			
Required for:	CH5714				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.				
	Scheduled learning: 17 hours	Guided independent study: 83 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews: 2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%				
Module Co-ordinator:	Dr G Haehner				
Lecturer(s)/Tutor(s):	Dr F D Morrison, Dr G Haehner				

# CH3715 Introduction to Analysis of Materials

SCOTCAT Credits:	10	SCQF Level 9	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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 scanning and transmission electron microscopy (SEM, TEM), 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.

Programme module type:	Compulsory for Chemical Sciences, Chemistry, Materials Chemistry, Chemistry and Geology, 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				
Pre-requisite(s):	Passes in CH2701 and at least one of CH2501 and (CH2601 or CH2603)				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 3 lectures per week over 5 - 7 weeks (Weeks 1-7) and 2 - 3 tutorials in total.				
	Scheduled learning: 17 hours	Guided independent study: 83 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%				
Module Co-ordinator:	Dr R T Baker				
Lecturer(s)/Tutor(s):	Dr R T Baker, Prof W Zhou				

#### **CH3716 Quantitative Aspects of Medicinal Chemistry** SCQF Level 9 **SCOTCAT Credits:** 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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. Programme module type: Compulsory for Biomolecular Science, Chemistry with Medicinal Chemistry, Chemistry with Medicinal Chemistry and External Placement. Optional for Chemical Sciences, Chemistry and Geology. Pre-requisite(s): Passes in at least two of CH2501, Anti-requisite(s): CH3717 CH2601, CH2701 Learning and teaching Weekly contact: 1 - 3 lectures per week over 9 - 10 weeks within Weeks 1-11 and methods and delivery: 2 - 3 tutorials in total. Scheduled learning: 18 hours Guided independent study: 82 hours Assessment pattern: As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0% As used by St Andrews: 2-hour Written Examination = 100% Re-Assessment pattern: Oral Re-assessment = 100%

Dr T van Mourik, Prof N J Westwood, tba

Dr T van Mourik

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

Statistical Mechanics and	d Computational	Chemistry				
SCOTCAT Credits:	10	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8	1	1	1		
Planned timetable:	To be arranged.					
This module combines the st methods as applied in mode covered in an introduction modern drug design process virtual screening.	ern chemistry. In the	e first set of lectur tistical mechanics.	es the molecular bas The use of computa	is of thermodynamics is ational chemistry in the		
Programme module type:	Compulsory for Chemistry, Materials Chemistry, Chemistry with External Placement, Chemistry and Physics, Materials Chemistry with External Placement.  Optional for Chemical Sciences, Chemistry and Geology, Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.					
Pre-requisite(s):	Passes in CH2701 and at least one of CH2501 and (CH2601 or CH2603)  Anti-requisite(s): CH3716			CH3716		
Required for:	CH5714			1		
Learning and teaching methods and delivery:	Weekly contact: 1 - 3 tutorials in tota		ek over 9 - 10 weeks	within Weeks 1-11 and 2		
	Scheduled learnin	g: 17 hours	Guided indepen	dent study: 83 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews: 2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessmer	nt = 100%				
Module Co-ordinator:	Dr T van Mourik					
Lecturer(s)/Tutor(s):	Dr T van Mourik, D	or J B O Mitchell				

SCOTCAT Credits:	10	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8		•			
Planned timetable:	9.00 am - 12.00 no	oon or 1.00 pm Mo	n to Fri (Weeks 6-	10)		
This module comprises prac programmes in Chemistry.	tical experiments in	volving physical m	easurements and t	the use of computationa		
Programme module type:	Compulsory for 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 Chemical Sciences, Chemistry and Mathematics, Chemistry with French, Chemistry with French and External Placement, Chemistry with Mathematics.					
Pre-requisite(s):	Passes in CH2701	and at least one of	CH2501 and (CH2	601 or CH2603)		
Learning and teaching methods and delivery:	Weekly contact: Daily 3- or 4-hour morning practical classes over 5 weeks (Weeks 7-11).					
	Scheduled learning	g: 90 hours	Guided indepe	endent study: 10 hours		
Assessment pattern:	As defined by QA	A:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 10  As used by St Andrews:					
	Coursework = 100	%				
Re-Assessment pattern:	No Re-Assessmen	t available, require	s lab attendance to	o complete coursework		
Module Co-ordinator:	Prof P A Wright					
Lecturer(s)/Tutor(s):	Prof P A Wright, P	rof M Buck Dr R S	hauh Dr Tvan Mo	ourik Prof M Ruehl		

SCOTCAT Credits:	90	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Available only to students on Chemistry degree programmes with External Placement				
Planned timetable:	Please Contact Sc	hool			
This module is intended to p similar laboratory. Activitie organisation's area of bu- analytical/measurement act involved in liaison with the c	es are very varied, siness. Some stud ivities. Some will b	, according to the dents will be eng e based exclusively	e nature of the gaged in synthe in a laboratory,	particular company's tic work and some	
Programme module type:	Compulsory for Chemistry with External Placement, Chemistry with French with External Placement, Chemistry with Medicinal Chemistry and External Placement, Materials Chemistry with External Placement.  Postgraduate - Optional for Chemistry MPhil.				
Pre-requisite(s):	Passes in at least two of CH2501, (CH2601 or CH2603), CH2701				
Co-requisite(s):	CH4454 and CH4455 and (CH4453 or CH4456) or FR5810				
Learning and teaching methods and delivery:	Weekly contact: I member of Schoo		ion by company s	upervisor, liaising with	
	Scheduled learning	ng: 0 hours	Guided indepe	endent study: 0 hours	
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
Assessment pattern:			Examinations = 0	%, Coursework = 100%	
Assessment pattern:		ions = 0%, Practical Irews:	Examinations = 0	%, Coursework = 100%	
Assessment pattern:  Re-Assessment pattern:	Written Examinat  As used by St And  Coursework = 100	ions = 0%, Practical Irews: 1%		%, Coursework = 100% al work to complete	

SCOTCAT Credits:	50	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Planned timetable:	2 days per week,	to be arranged.			
The research project at Leve design and problem-solving practical skills and teamwo selected and supervised by a	; abstraction, evalurk; communication	uation and interpr of results orally	etation of data in t	he chemical literature	
Programme module type:	Compulsory for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry with Medicinal Chemistry, Chemistry with French Materials Chemistry, Chemistry with Mathematics.				
Pre-requisite(s):	Passes in at least two of CH2501, (CH2601 or CH2603), CH2701		Anti-requisite(s):	CH4441, CH4444 - CH4449, ID4441	
Learning and teaching methods and delivery:	Weekly contact: 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.				
	Scheduled learning	ng: 340 hours	Guided indeper	ndent study: 160 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80  As used by St Andrews: 1-hour Practical Examination = 20%, Coursework = 80%				
Re-Assessment pattern:	No Re-Assessment available, requires lab attendance to complete coursework				
	Dr T van Mourik and Dr R Schaub				

SCOTCAT Credits:	60	SCQF Level 10	Semester:	1 & 2 (taught twice)		
Academic year:	2016/7					
Availability restrictions:	Available only for Non-graduating Students					
Planned timetable:	To be arranged.					
The research project at Leve design and problem-solving practical skills and teamwo selected and supervised by a	; abstraction, evaluers; communication	uation and interpre of results orally	etation of data i	in the chemical literature		
Programme module type:	Available only for Non-graduating Students					
Anti-requisite(s):	CH4442, CH4445 - CH4449, ID4441, CH5441					
Learning and teaching methods and delivery:	t   · · · · · · · · · · · · · · · · · ·					
	Scheduled learning	ng: 400 hours	Guided inde	pendent study: 200 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%					
	As used by St Andrews:  1-hour Practical Examination = 20%, Coursework = 80%					
	1-hour Practical E	xamination = $20\%$ ,	Coursework - or	J/0		
Re-Assessment pattern:		-		to complete coursework		

Chemistry Research Pro	ject for Non-gra	duating Studen	ts (90)		
SCOTCAT Credits:	90	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7				
Availability restrictions:	Available only for	Non-graduating Stu	dents		
Planned timetable:	To be arranged.				
The research project at Leve design and problem-solving practical skills and teamwo selected and supervised by a	; abstraction, evalurk; communication	uation and interpre of results orally a	tation of data in t	he chemical literature;	
Programme module type:	Available only for Non-graduating Students				
Anti-requisite(s):	CH4442, CH4444, CH4446 - CH4449, ID4441, CH5441				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Students spend a minimum of 40 hours per week of their tim on the project. This time includes practical work, literature study, reading and preparation of reports and presentation. Typically, 27 to 28 hours per week ar laboratory related.				
	Scheduled learning	ig: 600 hours	Guided indepen	dent study: 300 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%				
	As used by St And	lrews:			
	2-hour Practical E	xamination = 20%, 0	Coursework = 80%		
Re-Assessment pattern:	No Re-Assessmen	t available, requires	lab attendance to	complete coursework	
Module Co-ordinator:	No Re-Assessment available, requires lab attendance to complete coursework  Dr T van Mourik and Dr R Schaub				

SCOTCAT Credits:	120	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7				
Availability restrictions:	Available only for	Non-graduating Stu	ıdents		
Planned timetable:	To be arranged.				
The research project at Leve design and problem-solving practical skills and teamwo selected and supervised by a	; abstraction, evalurk; communication	uation and interpre of results orally a	tation of data in	n the chemical literature	
Programme module type:	Available only for Non-graduating Students				
Anti-requisite(s):	CH4442 - CH4445, CH4448, CH4449, ID4441, CH5441				
Learning and teaching methods and delivery:	Weekly contact: 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.				
	Scheduled learning	ng: 800 hours	Guided indep	endent study: 400 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%				
	As used by St And	lrews:			
	2-hour Practical Examination = 20%, Coursework = 80%				
Re-Assessment pattern:	No Re-Assessmen	t available, requires	lab attendance	to complete coursework	
	Dr T van Mourik and Dr R Schaub				

	hemistry and Ge			T		
SCOTCAT Credits:	20	SCQF Level 10	Semester:	1		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Available only to students on Chemistry and Geology degree programme					
Planned timetable:	To be arranged.					
The research project at Leve design and problem-solving practical skills and teamwork	; abstraction, evalu	uation and interpr	etation of data in t			
Programme module type:	Either (ES4010 and CH4448) or ID4441 are compulsory for Chemistry and Geology.					
Pre-requisite(s):	Passes in CH2501 and CH2701		Anti-requisite(s):	CH4442, CH5441, ID4441		
Co-requisite(s):	ES4010	·				
Learning and teaching methods and delivery:	Weekly contact: 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.					
	Scheduled learning	ng: 135 hours	Guided indepen	dent study: 65 hours		
Assessment pattern:	As defined by QA	A:				
	Written Examinat	ions = 0%, Practica	Examinations = 209	%, Coursework = 80%		
	As used by St And					
	30-minute Practic	al Examination = 2	0%, Coursework = 8	0%		
Re-Assessment pattern:	No Re-Assessmen	t available, require	s lab attendance to	complete coursework		
Module Co-ordinator:	D T 44 '1	No Re-Assessment available, requires lab attendance to complete coursework  Dr T van Mourik and Dr R Schaub				

SCOTCAT Credits:	20	SCQF Level 10	Semester:	Whole Year		
Academic year:	2016/7					
Availability restrictions:	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.					
Planned timetable:	To be arranged.					
The research project at Leve design and problemsolvin practical skills and teamwo selected and supervised by a	g; abstraction, eva rk; communication	luation and interpr of results orally a	etation of data in	the chemical literature		
Programme module type:	With permission, and only for Non-graduating Students					
Anti-requisite(s):	CH4442 - CH4448, CH5441, ID4441					
Learning and teaching methods and delivery:	<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.					
	Scheduled learning	<b>ng:</b> 135 hours	Guided indepe	ndent study: 65 hours		
Assessment pattern:	As defined by QA	A:	<u> </u>	ndent study: 65 hours 0%, Coursework = 80%		
Assessment pattern:	As defined by QA Written Examinat As used by St And	A: ions = 0%, Practical lrews:	Examinations = 20	·		
Assessment pattern:	As defined by QA Written Examinat As used by St And	A: ions = 0%, Practical	Examinations = 20	·		
· 	As defined by QA Written Examinat As used by St And 30-minute Oral Ex	A: ions = 0%, Practical frews: camination = 20%, 0	Examinations = 20  Coursework = 80%	•		
Assessment pattern:  Re-Assessment pattern:  Module Co-ordinator:	As defined by QA Written Examinat As used by St And 30-minute Oral Ex	A: ions = 0%, Practical lrews: camination = 20%, 0 t available, require	Examinations = 20  Coursework = 80%	0%, Coursework = 80%		

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SCOTCAT Credits:	10	SCQF Level 10	S	emester:	Whole Year
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Available only to students on the MChem Materials Chemistry, MChem Materials Chemistry with External Placement and BSc Materials Chemistry degree programmes.				
Planned timetable:	n/a - Distance Learning				
This distance-learning modu of various topics in Materials		to develop an adv	anc	ed understandin	g of the basic concept
Programme module type:	Compulsory for MChem in Materials Chemistry, MChem in Materials Chemistry with External Placement, BSc Materials Chemistry.				
Pre-requisite(s):	Passes in at least to (CH2601 or CH260				CH4452
Co-requisite(s):	For programmes v	with an External Pl	lace	ment: CH4441 ar	nd CH4454 and CH445
Learning and teaching	Weekly contact: [	Distance learning			
methods and delivery:	Scheduled learning	ng: 0 hours		Guided indepen	dent study: 100 hour
Assessment pattern:	As defined by QA	A:	•		
	Written Examinat	ions = 0%, Practica	al Ex	aminations = 0%	, Coursework = 100%
	As used by St And	lrews:			
	Coursework = 100	%			
Re-Assessment pattern:	Oral Re-assessme	nt = 100%			
Module Co-ordinator:	Dr E R Kay				
Lecturer(s)/Tutor(s):	Dr F D Morrison, [	or P T Bakar			

SCOTCAT Credits:	10	SCQF Level 10	Semester:	Whole Year		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	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.					
Planned timetable:	n/a - Distance lea	n/a - Distance learning				
This module offers the mat mode to students on the M module content.						
Programme module type:	Compulsory for MChem Chemistry with External Placement, MChem Chemistry with Medicinal Chemistry and External Placement and MChem Materials Chemistry with External Placement.					
Pre-requisite(s):		Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701  Anti-requisite(s): CH451				
Co-requisite(s):	CH4441, CH4454	and (CH4456 or CH	14453)	•		
Learning and teaching	Weekly contact:	Distance Learning				
methods and delivery:	Scheduled learning	ng: 0 hours	Guided indeper	ndent study: 100 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 1					
	As used by St And	drews:				
	Coursework = 100	)%				
Re-Assessment pattern:	Oral Re-assessme	nt = 100%				
	Dr E R Kay					
Module Co-ordinator:	Dr E R Kay					

66 Chemistry Distance Lea	rning (Organic C	Chemistry)			
SCOTCAT Credits:	10	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Available only to students on the MChem Chemistry with External Placement and MChem Chemistry with Medicinal Chemistry and External Placement degree programmes.				
Planned timetable:	n/a - Distance Learning				
This module offers the mat mode to students on the Momodule content.					
Programme module type:	Compulsory for MChem Chemistry with External Placement and MChem Chemistry with Medicinal Chemistry and External Placement.				
Pre-requisite(s):	Passes in (CH2601 or CH2603) and at least one of CH2501, CH2701		Anti-requisite(s):	CH4614, CH4451	
Co-requisite(s):	CH4441 and CH44	54 and CH4455			
Learning and teaching	Weekly contact: [	Distance Learning			
methods and delivery:	Scheduled learning	ng: 0 hours	Guided indeper	ndent study: 100 hours	
Assessment pattern:	As defined by QA Written Examinat		l Examinations = 0%	, Coursework = 100%	
	As used by St And	lrews:			
	Coursework = 100%				
Re-Assessment pattern:	Oral Re-assessme	nt = 100%			
Module Co-ordinator:	Dr E R Kay				
Lecturer(s)/Tutor(s):	Dr R A Aitken, Dr I	E Kay			

SCOTCAT Credits:	10	SCQF Level 10	Semester	:	Whole Year	
Academic year:	2016/7		•			
Availability restrictions:	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.					
Planned timetable:	n/a - Distance learning					
This module offers the mat mode to students on the M details of module content.						
Programme module type:	Optional for the MChem Chemistry with External Placement; MChem Chemistry with Medicinal Chemistry and External Placement; MChem Materials Chemistry with External Placement degree programmes.					
Pre-requisite(s):		Passes in CH2701 and (CH2501 or (CH2601 or CH2603))  Anti-requisite(s):		ite(s):	CH4714, CH4716, CH4454, CH4451	
Co-requisite(s):	CH4441				•	
Learning and teaching	Weekly cont	act: n/a distance learni	ng			
methods and delivery:	Scheduled le	earning: 0 hours	Guided	indepe	ndent study: 100 hou	
Assessment pattern:	As defined b Written Exar	y <b>QAA:</b> ninations = 0%, Practica	l Examinatio	ons = 0%	6, Coursework = 1009	
	As used by S	t Andrews:				
	Coursework	(Open-book problem-so	olving assess	ment) =	= 100%	
Re-Assessment pattern:	Reassessment by oral examination.  Students will be required to return to St Andrews at an appropriate time (for example at the end of their external placement) to be re-assessed. Details of reassessment as for CH4716.					
Module Co-ordinator:	Dr E R Kay					
	Prof M Buck, Prof M Buehl					

# CH4461 Integrating Chemistry SCOTCAT Credits: 10 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Chemistry BSc, Chemistry with Medicinal Chemistry BSc, Materials Chemistry BSc Optional for Chemistry with French BSc					
Pre-requisite(s):	Passes in CH2501, (CH2601 or CH2603), CH2701 Anti-requisite(s): CH5461					
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 classes per week over 8 weeks (Weeks 3-11) and a total of 3 x 1-hour seminars					
	Scheduled learning: 18 hours	Guided indepen	Guided independent study: 82 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practica	ıl Examinations = 0%,	Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	Oral Re-assessment = 100%					
Module Co-ordinator:	Dr R Schaub					
Lecturer(s)/Tutor(s):	all staff					

### **CH4514 Advanced Metal Chemistry**

	/			
SCOTCAT Credits:	10	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Compulsory for Chemical Sciences, Chemistry, Chemistry with Medicinal Chemistry, Chemistry with French MChem.  Optional for Chemistry and Geology, Chemistry and Mathematics, Chemistry with French BSc, Chemistry with Mathematics, Materials Chemistry.					
Pre-requisite(s):	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701  Anti-requisite(s): CH4455					
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.					
	Scheduled learning: 20 hours Guided independent study: 80 hours					
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practic	al E	xaminations = 0%,	Coursework = 0%		
	As used by St Andrews:					
	2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessment = 100%					
Module Co-ordinator:	Dr B E Bode					
Lecturer(s)/Tutor(s):	Dr E Zysman-Colman, Dr B E Bode					

# CH4515 Advanced Main Group Chemistry SCOTCAT Credits: 10 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Compulsory for Materials Chemistry, Chemistry with Medicinal Chemistry MChem Optional for Chemical Sciences, Chemistry, Chemistry and Mathematics,					
	Chemistry with French, Chemistry w		•	ia manematics)		
Pre-requisite(s):	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701  Anti-requisite(s): CH5513					
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 tutorials in total.					
	Scheduled learning: 20 hours		Guided indepen	dent study: 80 hours		
Assessment pattern:	As defined by QAA:	•				
	Written Examinations = 100%, Pract	tical	Examinations = 0	0%, Coursework = 0%		
	As used by St Andrews:					
	2-hour Written Examination = 100%	6				
Re-Assessment pattern:	Oral Re-assessment = 100%					
Module Co-ordinator:	Dr P Kilian	Dr P Kilian				
Lecturer(s)/Tutor(s):	Dr P Kilian, Dr A Stasch					

	7						
4612 Blockbuster Pharmaceu	2 Blockbuster Pharmaceuticals						
SCOTCAT Credits:	10	SCQF Level 10	Semester:	2			
Academic year:	2016/7 & 2017/8						
Planned timetable:	To be arranged.	To be arranged.					
compounds came to be disc	case studies from the most successful pharmaceutical products. How the overed, what diseases they are targeting, how they work and how they are made a Compounds that will feature are aspirin, penicillin, AZT, 5-flourouracil, Zantac, c.						
Programme module type:	Compulsory for Chemistry with Medicinal Chemistry.  Optional for Biomolecular Science, Chemical Sciences, Chemistry and Mathematics, Chemistry MChem, Chemistry with French, Chemistry with Mathematics						
Pre-requisite(s):	Passes in CH2501 of (CH2601 or CH2		Anti-requisite(s):	CH5615			
Learning and teaching methods and delivery:		2 - 3 lectures per w in total, plus a half		ks (within Weeks 1-11)			
	Scheduled learning	g: 20 hours	Guided indeper	ident study: 80 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews:						
Po Assessment nettern	2-hour Written Examination = 100%  Oral Re-assessment = 100%						
Re-Assessment pattern:		111 – 100%					
Module Co-ordinator:	Prof D O'Hagan						
Lecturer(s)/Tutor(s):	Prof D O'Hagan ar	nd visiting industria	al lecturers				

# CH4614 Heterocyclic and Pericyclic Chemistry SCOTCAT Credits: 10 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Chemical Sciences, Chemistry, Chemistry with French MChem, Chemistry with Medicinal Chemistry.				
	Optional for Biomolecular Science, Chemistry and Geology, Chemistry and Mathematics, Chemistry with French BSc, Chemistry with Mathematics.				
Pre-requisite(s):	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)				
Anti-requisite(s):	CH4456				
Learning and teaching methods and delivery:	<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.				
	Scheduled learning: 20 hours	Guided independent study: 80 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%				
Module Co-ordinator:	Dr R A Aitken				
Lecturer(s)/Tutor(s):	Dr R A Aitken, Dr E R Kay				

CH4615 Fragrance, Food and Colour Chemistry							
	SCOTCAT Credits:	10	SCQF Level 10	Semester:	2		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	To be arranged.					

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.

Compulsory for Chemistry with Medicinal Chemistry.  Optional for Biomolecular Science, Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry with French, Chemistry with Mathematics.  Optional for Sustainable Development.				
Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)				
CH4613				
Weekly contact: 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total				
Scheduled learning: 20 hours	Guided independent study: 80 hours			
As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
As used by St Andrews:				
2-hour Written Examination = 100%				
Oral Re-assessment = 100%				
Dr R A Aitken				
Dr R A Aitken, Dr R J M Goss, Prof T K S	mith			
	Optional for Biomolecular Science, Che and Mathematics, Chemistry with Fren Optional for Sustainable Development. Either passes in (CH2601 or CH2603) at passes in CH2501, CH2701 and (CH160 CH4613  Weekly contact: 2 - 3 lectures per wee and 2 - 3 tutorials in total  Scheduled learning: 20 hours  As defined by QAA: Written Examinations = 100%, Practical As used by St Andrews: 2-hour Written Examination = 100%  Oral Re-assessment = 100%  Dr R A Aitken			

CH4715 Functional Materials an	'15 Functional Materials and Electrons in Solids						
SCOTCAT Credits:	10	SCQF Level 10	Semester:	2			
Academic year:	2016/7 & 2017/8						
Planned timetable:	To be arranged.						
	the physical concepts of dielectrics, semiconductors, and metals. Electronic nd thin films which are fundamental to devices such as microprocessors, lasers in ill be discussed.						
Programme module type:	Compulsory for Materials Chemistry, Chemistry and Physics.  Optional for Chemical Sciences, Chemistry, Chemistry and Mathematics, Chemistry and Geology, Chemistry with French, Chemistry with Mathematics.						
Pre-requisite(s):	Either: passes in CH2701 and at least one of CH2501, (CH2601 or CH2603)  Anti-requisite(s): CH5712						
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials		eek over 9 - 10 weel	ks (within Weeks 1-11)			
	Scheduled learning	g: 20 hours	Guided indepen	ident study: 80 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0% As used by St Andrews:						
	2-hour Written Examination = 100%						
Re-Assessment pattern:	Oral Re-assessme	nt = 100%					
Module Co-ordinator:	Dr F D Morrison						
Lecturer(s)/Tutor(s):	Dr F D Morrison, F	Prof M Buck					

Re-Assessment pattern:

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

#### **CH4716 Electrochemistry and Computational Chemistry** SCQF Level 10 1 **SCOTCAT Credits:** 10 Semester: 2016/7 & 2017/8 Academic year: Planned timetable: To be arranged. One component of the module covers electrolyte solutions and ionic conductivity, equilibrium electrochemistry, electrode processes and applications of electrochemistry. The other component is a computational element, and will introduce aspects of modern computational chemistry related to the electronic structure of atoms, molecules and solids to achieve a basic understanding of the underlying approximations made in practical calculations, and consider applications of computed structures and energies in chemistry. Programme module type: Compulsory for Chemical Sciences, Chemistry, Chemistry with French, Materials Chemistry (MChem), Chemistry with Medicinal Chemistry (MChem), Chemistry and Physics. Optional for Chemistry and Geology, Chemistry and Mathematics, Chemistry with Mathematics, Materials Chemistry (BSc). Either passes in CH2701 and (CH2501 or (CH2601 or CH2603)) or passes in Pre-requisite(s): CH2701 and CH2501 and (CH1601 or CH1202). Anti-requisite(s): CH4714, CH4457, CH4454, CH4451 Learning and teaching Weekly contact: 2 hours of lectures (x 9 weeks) and 2 hours of tutorials over methods and delivery: the semester. Scheduled learning: 20 hours Guided independent study: 80 hours Assessment pattern: As defined by QAA:

As used by St Andrews:

Prof M Buck

Oral Re-assessment = 100%

Prof M Buck, Prof M Buehl

2-hour Written Examination = 100%

Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%

# CH4717 Fundamentals of the Spectroscopy of Molecules and Solids SCOTCAT Credits: 10 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

This module describes the properties of matter relevant to their interaction with electromagnetic radiation. Absorption, transmission, reflection and diffraction of light across the electromagnetic spectrum are covered. There is a focus on microwave, infrared and NMR spectroscopy. Solid-state NMR spectroscopy will be compared with solution-state NMR and the advantages of solid-state NMR in obtaining structural information discussed.

Programme module type:	Compulsory for Materials Chemistry and Chemistry & Physics Optional for Chemical Sciences, Chemistry, Chemistry with French, Chemistry with Mathematics, Chemistry and Mathematics.					
Pre-requisite(s):	Passes in CH2701 and (CH2501 or (CH2601 or CH2603))  Anti-requisite(s): CH4713					
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 hours of lectures (x 9 weeks) and 2 hours of tutorials over the semester.					
	Scheduled learning: 20 hours Guided independent study: 80 hours					
Assessment pattern:	As defined by QAA:					
	Written Examinations = 100%, Pract	ical	Examinations = 0	0%, Coursework = 0%		
	As used by St Andrews:					
	2-Hour Written Examination = 100%	ó				
Re-Assessment pattern:	Oral re-assessment = 100%					
Module Co-ordinator:	Dr R Schaub					
Lecturer(s)/Tutor(s):	Dr R Schaub, Prof S E M Ashbrook					

Research Project						
SCOTCAT Credits:	50	SCQF Level 11	Semester:	Whole Year		
Academic year:	2016/7 & 2017/8					
Planned timetable:	2 days per week, to be arranged.					
The research project at Leve in the following areas: expe of data in the chemical lite dissertation. The project is s selected by both superviser	rimental design and rature; practical sk supervised by a mer	d problem-solving; ills and teamwork; nber of the acaden	abstraction, evalua communication of nic staff. The projec	tion and interpretation results orally and in		
Programme module type:	Placement, Chem Mathematics, Che Chemistry with M	istry with French ar emistry with Medici edicinal Chemistry H5101), Materials C		ent, Chemistry with em, Chemistry MChen nent, Chemistry and		
Pre-requisite(s):	Passes in at least (CH2601 or CH260	· ·	Anti-requisite(s): CH4444-CH4449, ID4441			
Learning and teaching methods and delivery:	Weekly contact: 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.					
	Scheduled learning	ig: 340 hours	Guided indeper	ident study: 160 hour		
Assessment pattern:	As defined by QA Written Examinat		Examinations = 209	%, Coursework = 80%		
	As used by St Andrews:					
	1-hour Practical E	xamination = 20%,	Coursework = 80%			
Re-Assessment pattern:	No Re-Assessmen	t available, require	s lab attendance to	complete coursework		
Module Co-ordinator:	Dr T van Mourik a	Dr T van Mourik and Dr R Schaub				
Lecturer(s)/Tutor(s):	all staff					

#### **CH5461 Integrating Chemistry SCOTCAT Credits:** SCQF Level 11 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged. 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. Programme module type: 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, Materials Chemistry MChem, Materials Chemistry with External Placement. Pre-requisite(s): Passes in CH2501, (CH2601 or Anti-requisite(s): CH4461 CH2603), CH2701 Learning and teaching Weekly contact: 2 classes per week over 8 weeks (Weeks 3-11) and a total of 3 methods and delivery: x 1-hour seminars. Scheduled learning: 18 hours Guided independent study: 82 hours Assessment pattern: As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40% As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40% **Re-Assessment pattern:** Oral Re-assessment = 100%

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

Dr R Schaub

all staff

SCOTCAT Credits:	10	SCQF Level 11	Semester:	1				
Academic year:	2016/7 & 2017/8							
Planned timetable:	To be arranged.							
This module discusses the u of homogeneous catalysis. I principles described.								
Programme module type:	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.							
Pre-requisite(s):	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701							
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials	•	eek over 9 - 10 wee	ks (within Weeks 1-11				
	Scheduled learning	ng: 20 hours	Guided indeper	ndent study: 80 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 09 As used by St Andrews: 2-hour Written Examination = 100%							
Re-Assessment pattern:	Oral Re-assessme	nt = 100%						
Module Co-ordinator:	Prof P C J Kamer	Prof P C J Kamer						
Lecturer(s)/Tutor(s):	Drof D C I Vamor	Drof D D Tooro		Prof P C J Kamer, Prof R P Tooze				

SCOTCAT Credits: 10 SCQF Level 11 Semester: 2  Academic year: 2016/7  Planned timetable: To be arranged.  Phosphines and carbenes represent the most common ligands used in many applications						
Planned timetable: To be arranged.						
Phosphines and carbenes represent the most common ligands used in many applications						
complexes. Recent developments have allowed very precise design of properties of complexes as new ligand design. In this module design principles will be addressed and applications of these complexes in industry will be discussed.	a result of					
Chemistry with External Placement, Chemistry with Medicinal Chemistry with French and External Placement, Chemistry with Medicinal Chemistry with French and External Placement, Chemistry with Medicinal Chemistry with Medicinal Chemistry with French and External Placement, Chemistry with French and	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.					
Pre-requisite(s): Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701					
Learning and teaching methods and delivery: Weekly contact: 2 - 3 lectures per week over 9 - 10 weeks (within We and 2 - 3 tutorials in total.	eks 1-11)					
Scheduled learning: 20 hours Guided independent study:	30 hours					
Assessment pattern:  As defined by QAA:  Written Examinations = 100%, Practical Examinations = 0%, Coursewo	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
As used by St Andrews:	As used by St Andrews:					
2-hour Written Examination = 100%	2-hour Written Examination = 100%					
Re-Assessment pattern: Oral Re-assessment = 100%	Oral Re-assessment = 100%					
Module Co-ordinator: Prof P C J Kamer	Prof P C J Kamer					
Lecturer(s)/Tutor(s): Prof P C J Kamer						

Advanced Physical Inorganic Chemistry						
SCOTCAT Credits:	10	SCQF Level 11	Semester:	2		
Academic year:	2016/7					
Planned timetable:	To be arranged.					
	le involves distinct sections on photophysics of coordination complexes including theory and s, and inorganic 'open shell' compounds including synthesis, characterisation and applications of tic inorganic species.					
Programme module type:	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.					
Pre-requisite(s):	Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701					
Learning and teaching methods and delivery:	Weekly contact: 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.					
	Scheduled learning: 20 hours  Guided independent study: 80 hours  As defined by QAA:  Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews:					
Assessment pattern:						
	2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessment = 100%					
Module Co-ordinator:	Dr E Zysman-Colman					
Lecturer(s)/Tutor(s):	Dr E Zysman-Colm	ian, Dr B Bode				

#### **CH5518 Blockbuster Solids SCOTCAT Credits:** SCQF Level 11 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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. Programme module type: 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. Passes in CH2501 and at least one of (CH2601 or CH2603), CH2701 Pre-requisite(s): Learning and teaching Weekly contact: 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) methods and delivery: and 2 - 3 tutorials in total. Scheduled learning: 20 hours Guided independent study: 80 hours Assessment pattern: As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0% As used by St Andrews: 2-hour Written Examination = 100% Re-Assessment pattern: Oral Re-assessment = 100% **Module Co-ordinator:** Prof P Lightfoot Lecturer(s)/Tutor(s): Prof P Lightfoot, Prof R E Morris

CH5611 Asymmetric Synthesis							
	SCOTCAT Credits:	10	SCQF Level 11	Semester:	1		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	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.

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.			
Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)			
<b>Weekly contact</b> : 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
Scheduled learning: 20 hours	Guided independent study: 80 hours		
As defined by QAA:			
Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
As used by St Andrews:			
2-hour Written Examination = 100%			
Oral Re-assessment = 100%			
Dr M L Clarke			
Dr M L Clarke, Prof A D Smith			
	Chemistry with External Placement, Chexternal Placement. Optional for Biomolecular Science, Chewith French and External Placement, C Either passes in (CH2601 or CH2603) at passes in CH2501, CH2701 and (CH160) Weekly contact: 2 - 3 lectures per wee and 2 - 3 tutorials in total.  Scheduled learning: 20 hours  As defined by QAA: Written Examinations = 100%, Practical As used by St Andrews: 2-hour Written Examination = 100%  Oral Re-assessment = 100%  Dr M L Clarke		

#### CH5612 Natural Products, Biosynthesis and Enzyme Co-factors **SCOTCAT Credits:** SCQF Level 11 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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. Programme module type: 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. Pre-requisite(s): Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202) Learning and teaching Weekly contact: 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total. methods and delivery: Scheduled learning: 20 hours Guided independent study: 80 hours Assessment pattern: As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0% As used by St Andrews: 2-hour Written Examination = 100% Re-Assessment pattern: Oral Re-assessment = 100% **Module Co-ordinator:** Prof D O'Hagan Lecturer(s)/Tutor(s): Prof D O'Hagan, Prof T K Smith, Dr G J Florence

Reactive Intermediates					
SCOTCAT Credits:	10	SCQF Level 11	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				
Aspects of the organic charbanions, free radicals, careactive intermediate will be characteristic reactions high their significance in mechan	rbenes, nitrenes ar e introduced. The k lighted. An underst	nd arynes will be co ey reactions of eac anding of the use	overed. Means of a	generating each type o Il be reviewed and thei	
Programme module type:	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.				
Pre-requisite(s):	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)				
Learning and teaching methods and delivery:					
	Scheduled learning	ig: 20 hours	Guided indepe	ndent study: 80 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%				
Module Co-ordinator:	Dr R A Aitken				
Lecturer(s)/Tutor(s):	Dr R A Aitken, Dr I A Smellie				

### CH5614 Chemical Biology SCOTCAT Credits: 10 SCQF Level 11 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	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.					
Pre-requisite(s):	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)					
Learning and teaching methods and delivery:	Weekly contact: 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.					
	Scheduled learning: 20 hours	Guided independent study: 80 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews: 2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessment = 100%	Oral Re-assessment = 100%				
Module Co-ordinator:	Prof J H Naismith					
Lecturer(s)/Tutor(s):	Prof J H Naismith, Prof N J Westwood					

Molecular Recognition						
SCOTCAT Credits:	10	SCQF Level 11	Semester:	2		
Academic year:	2016/7 & 2017/8					
Planned timetable:	To be arranged.	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.						
Programme module type:	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.					
Pre-requisite(s):	Either passes in (CH2601 or CH2603) and at least one of CH2501, CH2701 or passes in CH2501, CH2701 and (CH1601 or CH1202)					
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials	•	ek over 9 - 10 wee	ks (within Weeks 1-11)		
	Scheduled learning	ig: 20 hours	Guided indepen	ident study: 80 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews: 2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessme	nt = 100%				
Module Co-ordinator:	Prof D Philp	Prof D Philp				
Lecturer(s)/Tutor(s):	Prof D Philp, Dr E	R Kay				

Advanced Spectroscopic Methods						
SCOTCAT Credits:	10	SCQF Level 11	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	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.						
Programme module type:	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.					
Pre-requisite(s):	Passes in CH2701 and CH2501					
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials		ek over 9 - 10 wee	ks (within Weeks 1-11)		
	Scheduled learning: 20 hours Guided independent study: 80 hours					
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews: 2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessme	nt = 100%				
Module Co-ordinator:	Prof C J Baddeley	Prof C J Baddeley				
Lecturer(s)/Tutor(s):	Prof C J Baddeley,	Dr G Haehner				

Surface Science and Heterogeneous Catalysis					
SCOTCAT Credits:	10	SCQF Level 11	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	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.					
Programme module type:	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.				
Pre-requisite(s):	Passes in CH2701 and CH2501				
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials		eek over 9 - 10 wee	ks (within Weeks 1-11)	
	Scheduled learning	g: 20 hours	Guided indepen	dent study: 80 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessme	nt = 100%			
Module Co-ordinator:	Prof C J Baddeley				
Lecturer(s)/Tutor(s):	Prof C J Baddeley,	Prof P A Wright			

SCOTCAT Credits:	10	SCQF Level 11	Semester:	2			
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8					
Planned timetable:	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.							
Programme module type:	Compulsory for Cl	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.						
Pre-requisite(s):	Passes in CH2701, CH2501, CH3712 and CH3717						
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials	•	eek over 9 - 10 wee	ks (within Weeks 1-11)			
	Scheduled learning: 20 hours Guided independent study: 80 hours						
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2-hour Written Examination = 100%						
Re-Assessment pattern:	Oral Re-assessme	nt = 100%					
Module Co-ordinator:	Dr J B O Mitchell						
·	Dr J B O Mitchell Dr J B O Mitchell,	Dr T van Mourik					

SCOTCAT Credits:	10	SCQF Level 11	Semester:		2	
Academic year:	2016/7 & 2017/8					
Planned timetable:	To be arranged.					
In our efforts to mitigate glo and storage of energy. Fore and fuel cells. In this module emphasis will be placed on t	emost among these e we will discuss the	e methods are the e technical details	electrocher and applicat	nical te	echnologies of batterie	
Programme module type:	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.					
Pre-requisite(s):	Passes in CH2701	and CH2501	Anti-requisi	te(s):	CH4712	
Learning and teaching methods and delivery:	Weekly contact: 2 and 2 - 3 tutorials		eek over 9 -	10 wee	ks (within Weeks 1-11)	
	Scheduled learning	ng: 20 hours	Guided i	ndepe	ndent study: 80 hours	
Assessment pattern:	As defined by QA	A:	•			
	Written Examinat	ions = 100%, Practi	ical Examina	tions =	0%, Coursework = 0%	
	As used by St And	lrews:				
	2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-assessme	nt = 100%				
Module Co-ordinator:	Dr R T Baker					

### CH5716 Processing of Materials SCOTCAT Credits: 10 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Compulsory for Materials Chemistry MChem, Materials Chemistry with External Placement.			
Pre-requisite(s):	Passes in CH2701, CH2501 and CH3513			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.			
	Scheduled learning: 20 hours Guided independent study: 80 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews:			
	2-hour Written Examination = 100%			
Re-Assessment pattern:	Oral Re-assessment = 100%			
Module Co-ordinator:	Prof J T S Irvine			
Lecturer(s)/Tutor(s):	Prof J T S Irvine, Dr M Cassidy			

CH5717	CH5717 Nanostructured Materials						
	SCOTCAT Credits:	10	SCQF Level 11	Semester:	1		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	To be arranged.					

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.

Programme module type:	Compulsory for Materials Chemistry MChem, Materials Chemistry with External Placement.				
	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.				
Pre-requisite(s):	Passes in CH2701 and CH2501				
Learning and teaching methods and delivery:	Weekly contact: 2 - 3 lectures per week over 9 - 10 weeks (within Weeks 1-11) and 2 - 3 tutorials in total.				
	Scheduled learning: 20 hours Guided independent study: 80 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	2-hour Written Examination = 100%				
Re-Assessment pattern:	Oral Re-assessment = 100%				
Module Co-ordinator:	Prof W Zhou				
Lecturer(s)/Tutor(s):	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 & Archaeology (AA) modules

Lecturer(s)/Tutor(s):

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8					
Availability restrictions:		tudents in Honours al History and Arch		nd Archaeology or		
Planned timetable:	2.00 pm - 4.00 pm Thu					
The first is a series of semi- which the type of excavation publish archaeological mate enable students to understa Honours degree. The second	s module, which draws on archaeological material from around the world, is divided into two sections of first is a series of seminars and lectures on the central practical concerns of archaeology: the way in ich the type of excavation affects the resulting evidence; methods of studying sites and artefacts; how to olish archaeological material, and the importance of conservation. This will give a general grounding to able students to understand archaeological reports, and to apply this understanding to other parts of the nours degree. The second part will address the important contribution of theoretical archaeology to the cipline, while also elucidating the practical applications and relevance of theory.					
Programme module type:	Compulsory for Ancient History & Archaeology, Mediaeval History & Archaeology					
Pre-requisite(s):	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					
Anti-requisite(s):	AN3020					
Learning and teaching	Weekly contact: Induction class in Orientation Week followed by 2 hours of lectures and seminars and 1 coursework consultation hour per week.					
methods and delivery:	icetares and semi	nars and 1 coursew	ork consultation no	our per week.		
methods and delivery:	Scheduled learning			our per week. ndent study: 266 hours		
,	Scheduled learning As defined by QA	<b>ng:</b> 34 hours <b>A:</b>	Guided indeper	•		
,	Scheduled learning As defined by QA	ng: 34 hours  A: ions = 0%, Practical lrews:	Guided indeper	ndent study: 266 hours		
Assessment pattern:	Scheduled learnin As defined by QA Written Examinat As used by St And Coursework = 100	ng: 34 hours  A: ions = 0%, Practical lrews: %	Guided indeper  Examinations = 0%	ndent study: 266 hours		
Assessment pattern:  Re-Assessment pattern:  Module Co-ordinator:	Scheduled learning As defined by QA Written Examinat As used by St And Coursework = 100 New coursework	ng: 34 hours  A: ions = 0%, Practical lrews: %	Guided indeper  Examinations = 0%	ndent study: 266 hours		

Dr J Coulston, Dr E Cousins

### AA4002 From Pompeii to Aquileia: the Archaeology of Roman Italy (50 BCE - 300 CE) SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 9.00 am - 11.00 am Wed

At the height of the empire, Italy was one of the most prosperous and densely populated areas of the Mediterranean. Its centrality in imperial politics and culture, as well as its long history, have contributed to an unparalleled archaeological record that fascinates scholars and the world outside academia. This module will offer an overview of this rich material, exploring a range of issues such as the impact of empire; the nature of local public life; social and economic life; urban and rural settlements; and aspects of religious life. It will include case-studies of cities like Pompeii, Ostia and Aquileia, as well as of regions like the Tiber valley and Sicily. The module will discuss the nature of the archaeological evidence in rural and urban archaeology, and its implications for the understanding of the history and material culture of a key area of the Roman empire.

Programme module type:	Optional for all Ancient History Degrees, Ancient History & Archaeology, Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding three-subject) Degrees, History, Mediaeval History & Archaeology			
Pre-requisite(s):	Permission of the Classics Honours Adviser.			
Learning and teaching	Weekly contact: 1 x 2-hour seminar and 1 coursework consultation hour.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr C Machado			
Lecturer(s)/Tutor(s):	Dr C Machado			

### AA4121 The Ancient City of Rome SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 9.00 am - 11.00 am 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.

Programme module type:	Optional for all Ancient History Degrees, Ancient History & Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History, Mediaeval History & Archaeology, Scottish History				
Pre-requisite(s):	Permission of the Classics Honours Adviser.  Anti-requisite(s): AN4121				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction meeting in Orientation Week followed by 2 hours of lectures and seminars, and 1 coursework consultation hour per week.				
	Scheduled learning: 33 hours Guided independent study: 267 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practi	cal E	Examinations = 09	%, Coursework = 50%	
	As used by St Andrews:				
	3-hour Written Examination = 50%,	Cou	ursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr J Coulston				
Lecturer(s)/Tutor(s):	Dr J Coulston				

### AA4130 The Roman Army SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 2.00 pm - 4.00 pm Thu

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.

Programme module type:	Optional for all Ancient History Degrees, Ancient History & Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History, Mediaeval History & Archaeology, Scottish History			
Pre-requisite(s):	Permission of the Classics Honours Adviser  Anti-requisite(s): AN4130			AN4130
Learning and teaching methods and delivery:	Weekly contact: 2 hours of lectures and seminars, and 1 coursework consultation hour.			
	Scheduled learning: 33 hours Guided independent study: 267 hours			dent study: 267 hours
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr J Coulston			
Lecturer(s)/Tutor(s):	Dr J Coulston			

### **Ancient History (AN) modules**

### AN3034 Approaches to Ancient History SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 2.00 pm - 4.00 pm Thu.

Whereas antiquarians let the sources set their agenda, historians start with questions. As a preparation for the serious study of Ancient History at honours level, his module aims to make students better historians through close study of a selection of challenging and innovative works of scholarship. Each week students will read a book or article that revolutionised its field. They will learn that major advances often involve posing entirely new questions or finding novel ways of approaching familiar problems. They will learn the value (and the limits) of models, theory and different types of evidence. They will finish with a clearer appreciation of the wide range of approaches open to ancient historians and the importance of choosing between them.

Programme module type:	Compulsory for Ancient History Degrees (including three-subject)		
Pre-requisite(s):	Entry to single or joint (including triple) Honours Ancient History.		
Learning and teaching methods and delivery:	Weekly contact: Induction class in Orientation Week followed by 2 hours of lectures and seminars and 1 coursework consultation hour per week.		
	Scheduled learning: 34 hours Guided independent study: 266 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	New Coursework = 100%		
Module Co-ordinator:	Dr C Machado		

AN4110 The Culture of Roman Imperialism					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year: 2016/7				
	Planned timetable:	11.00 am - 1.00 pm Fri.			

What imperial powers think they are doing and what they claim to do are issues that deserve just as much scrutiny as their conduct in practice. This module explores how the Roman elite conceived their imperial project how they explained and justified Rome's conquest of the Mediterranean world and how they thought Roman power should be used. It also asks how literary and visual culture were complicit in legitimising and promoting the imperial project. Key topics include cosmocracy, peace and pacification, the civilising mission, ethnography and the idea of the barbarian. Discussion will proceed through close analysis of a wide range of texts and images.

Programme module type:	Optional for all Ancient History Degrees, Ancient History & Archaeology, and Classical Studies, Classics, Greek and Latin (Single and Joint, but excluding Three subject) Degrees, History, Mediaeval History & Archaeology, Scottish History			
Learning and teaching	Weekly contact: 1 x 2-hour seminar and 1 coursework consultation hour.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hou			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	As used by St Andrews:  2-hour Written Examination = 40%, Coursework = 60%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr M Lavan			
Lecturer(s)/Tutor(s):	Dr M Lavan	Dr M Lavan		

### AN4155 Religious Communities in the Late Antique World SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 9.00 am - 11.00 am Wed.

The late antique period was marked by dramatic developments in the religious history of the Mediterranean, such as the decline of pagan cults, the rise and establishment of Christianity, and the spread of Islam. This module will approach these developments from the perspective of local communities, asking how they responded to and helped to shape these wider processes, considering religious change in its proper social and cultural context. Issues such as the definition of religious identities, the construction of religious authority, and the role played by religion in urban life will be considered in a comparative perspective, through the analysis of specific cases from around the Mediterranean.

Programme module type:	Optional for Ancient History, Classical Studies		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction meeting in Orientation Week followed by 2 hours of lectures and seminars, and 1 coursework consultation hour per week.		
	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 35%, Practical Examinations = 20%, Coursework = 45%		
	As used by St Andrews:		
	2-hour Written Examination = 35%, Coursework = 65%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C Machado		
Lecturer(s)/Tutor(s):	Dr C Machado		

#### **AN4426 Roman Slavery**

rtoman slavery				
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	11.00 am - 1.00 pm Fri.			

The institution of slavery lies at the heart of Roman society and culture. On one estimate, slaves made up 30-40% of the population of Roman Italy, with the richest households boasting hundreds of slaves. This course offers a holistic perspective on Roman slavery. We will cover the demography, economics and law of slavery, explore the the mechanisms of control that enabled the wealthy to maintain he subjection of so many slaves, examine philosophical debates about the ethics of mastery, and trace the ramifications of the everyday experience of living with slaves throughout Roman culture and literature.

Programme module type:	Optional for Ancient History & Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees		
Anti-requisite(s):	CL4457		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction meeting in Orientation Week followed by 2 hours of lectures and seminars, and 1 coursework consultation hour per week.		
	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%		
	As used by St Andrews:		
	2-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Lavan		
Lecturer(s)/Tutor(s):	Dr M Lavan	·	

### AN4427 Greeks and Others SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 9.00 am - 11.00 am Thu.

How did Greeks conceptualise others? What forms of contact where there between Greeks and non-Greeks? How did the relationship of Greeks and others evolve as a result of major historical events (the Persian wars, or the conquests of Alexander)? This module examines the history of the Greek engagement with the Other (and of Greek self-definition) from the archaic to the early hellenistic periods, focusing in particular on the different mediums through which the relationship was expressed: ethnographic writing, coinage, panhellenic festivals, or the borrowing of artefacts.

Programme module type:	Optional for all Ancient History Degrees, Ancient History & Archaeology, Classical Studies, Classics, Greek and Latin (single and joint, but not three subject) degrees, also History.		
Learning and teaching	Weekly contact: 1 x 2-hour seminar , plus 1 tutorial.		
methods and delivery:	Scheduled learning: 34 hours Guided independent study: 266 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof T Harrison		
Lecturer(s)/Tutor(s):	Prof T Harrison		

### **Classical Studies (CL) modules**

CL4406 Herodotus	406 Herodotus					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2		
Academic year:	2016/7	2016/7				
Planned timetable:	9.00 am - 11.00 am Tue.					
has undergone serious re-eva its value as historical evidenc intellectual context. Topics w	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.					
Programme module type:	Optional for Ancient History & Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees					
Pre-requisite(s):	Permission of the Classics Honours Anti-requisite(s): AN4122, GK4123 Adviser.					
Learning and teaching	Weekly contact: 1 x 2-hour seminar and 1 coursework consultation hour.					
methods and delivery:	Scheduled learning	g: 33 hours	Guided independ	dent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews:					
	3-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	Dr R Anderson					
Lecturer(s)/Tutor(s):	Dr R Anderson					

### CL4433 Religions of the Greeks SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7

2.00 pm - 4.00 pm Tue.

Planned timetable:

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.

Programme module type:	Optional for Ancient History & Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees		
Pre-requisite(s):	Permission of the Classics Honours Adviser.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction meeting in Orientation Week followed by 2 hours of lectures and seminars, and 1 coursework consultation hour per week.		
	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr R Anderson		
Lecturer(s)/Tutor(s):	Dr R Anderson		

CL4445 Women in Ancient Societies					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	2.00 - 3.00 pm Tue and Fri.			

This module studies women and gender in Greece, the Hellenistic world and the Roman Republic and Empire from different perspectives. It will consider representations of women in literature, epigraphy and art, legal and forensic evidence, and medical treatises. It will look at women in the context of ancient families and city communities, marriage, children, ritual and religion and the existence or otherwise of outlets for 'individual' fulfilment.

Programme module type:	Optional module for Classical Studies. Also available as an option in other degrees within the School subject to degree requirements.		
Pre-requisite(s):	Permission of the Classics Honours Adviser.		
Learning and teaching	Weekly contact: 2 x 1-hour seminars, and 1 coursework consultation hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%		
	As used by St Andrews:		
	2-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Lewis		
Lecturer(s)/Tutor(s):	Dr S Lewis		

### CL4433 Religions of the Greeks SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7

2.00 pm - 4.00 pm Tue.

Planned timetable:

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.

Programme module type:	Optional for Ancient History & Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees			
Pre-requisite(s):	Permission of the Classics Honours Advis	er.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction meeting in Orientation Week followed by 2 hours of lectures and seminars, and 1 coursework consultation hour per week.			
	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Ex	xaminations = 0%, Coursework = 50%		
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr R Anderson			
Lecturer(s)/Tutor(s):	Dr R Anderson			

CL4445 Women in Ancient Societies						
	SCOTCAT Credits:	30 SCQF Level 10 Semester: 2				
	Academic year:	2016/7				
	Planned timetable:	2.00 - 3.00 pm Tue and Fri.				

This module studies women and gender in Greece, the Hellenistic world and the Roman Republic and Empire from different perspectives. It will consider representations of women in literature, epigraphy and art, legal and forensic evidence, and medical treatises. It will look at women in the context of ancient families and city communities, marriage, children, ritual and religion and the existence or otherwise of outlets for 'individual' fulfilment.

Programme module type:	Optional module for Classical Studies. Also available as an option in other degrees within the School subject to degree requirements.			
Pre-requisite(s):	Permission of the Classics Honours Adviser.			
Learning and teaching	Weekly contact: 2 x 1-hour seminars, and 1 coursework consultation hour.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Ex	xaminations = 0%, Coursework = 50%		
	As used by St Andrews:			
	3-hour Written Examination = 50%, Cour	rsework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr S Lewis			
Lecturer(s)/Tutor(s):	Dr S Lewis			

### CL4461 Senecan Tragedy and its Reception SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 10.00 am - 12.00 noon Fri.

This module explores Senecan Tragedy, the 'dark side' of Seneca the Younger's literary output, and its reception in the early modern and contemporary periods. It puts Seneca in his contemporary context, examines the influence of Greek and Roman tragic and epic antecedents, and sets the 'nefarious' poetics of his drama in the context of his philosophical writings and his Neronian political setting. We then study Seneca's most fertile period of influence, the early modern period: poetry and plays by a range of authors shows how Senecan tragedy refracts the religious and cultural pressures of Elizabethan England. Finally, we focus on Senecan tragedy's afterlife in the twentieth and twenty-first centuries. The cultural impact of Seneca's dramas may have waned, but the work of playwrights like Ted Hughes, Tony Harrison and Sarah Kane shows how Senecan tragedy is still a powerful conduit for contemporary struggle with the problems of tyrannical power, gender identity and nature of evil.

Programme module type:	Optional for Ancient History, Classical Studies, Classics, Latin				
Pre-requisite(s):	Permission of the Classics Honours Adviser	Anti-requisite(s):	LT4215		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction meeting in Orientation Week followed by 2 hours of lectures and seminars, and 1 coursework consultation hour per week.				
	Scheduled learning: 33 hours Guided independent study: 26		dent study: 267 hours		
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practica	I Examinations = 0%,	Coursework = 50%		
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr E Buckley				
Lecturer(s)/Tutor(s):	Dr E Buckley				

CL4502 Ethics and Lifestyles: Philosophy and Ways of Living in Antiquity					
	SCOTCAT Credits:	30 SCQF Level 10 Semester: 2			
	Academic year:	2016/7			
	Planned timetable:	11.00 am - 1.00 on Wed.			

For the major philosophers and philosophical schools of antiquity (including Platonism, Stoicism and Epicureanism), philosophy was not just a matter of abstract ideas about the cosmos but of everyday conduct and ethics. Philosophy gave guidance on how life should be lived. Issues such as mortality and immortality, death, friendship, love and vegetarianism were common topics of debate. Biographies of philosophers, often written by other philosophers, reflect this preoccupation with the practical, presenting philosophers as examples of how to live, teach and act. This module examines the functions, purposes and contexts of philosophical biography, considering the interconnections and interplay between biography and philosophy in antiquity. The focus will be the philosophy of the Roman Imperial period (including the Second Sophistic) and Late Antiquity and texts such as Porphyry's On Abstinence from Killing Animals, Eunapius' Lives of the Philosophers, and Iamblichus' On the Pythagorean Way of Life will be considered.

Programme module type:	Optional for Ancient History & 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.				
Pre-requisite(s):	Permission of the Classics Honours Adviser. Anti-requisite(s): CL4458				
Learning and teaching	Weekly contact: 1 x 1-hour lecture ar	nd 1 x 1-hour semina	r.		
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 278 ho				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr C Addey				
Lecturer(s)/Tutor(s):	Dr C Addey				

### CL4604 Greek Sculpture SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 9.00 am - 11.00 am Fri.

The art of ancient Greece still holds power today. But how would objects such as the Parthenon Marbles or the Venus de Milo have been understood and experienced by ancient viewers? This module traces the development of Greek sculpture from the Archaic through to the Classical and Hellenistic periods, starting with Archaic kouroi and concluding with Bactrian art in what is now Afghanistan. It explores the changing aesthetics and styles of sculpture in the Greek world, and examines the social roles and architectural contexts of sculptural art from cult statues to grave stelae. It also considers the part played by Roman copies in our knowledge and understanding of Greek statues.

Programme module type:	Optional module for Classical Studies, Ancient History, Ancient History & Archaeology, Greek, Latin and Classics joint and single Honours and for some Triple Honours combinations that include Classical subjects.				
Pre-requisite(s):	Permission of the Classics Honours Anti-requisite(s): CL4458 Adviser.				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction meeting in Orientation Week followed by 2 hours of lectures and seminars and 1 coursework consultation hour per week.				
	Scheduled learning: 34 hours Guided independent study: 267 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr E Cousins				
Lecturer(s)/Tutor(s):	Dr E Cousins				

CL4794	CL4794 Joint Dissertation (30cr)				
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.			
	Planned timetable:	To be arranged.			

The dissertation must consist of not more than 10,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Joint or Triple Honours in the School of Classics				
Pre-requisite(s):	A Letter of Agreement	Anti-requisite(s):		More than 30 credits in other dissertation / project modules	
Learning and teaching	Weekly contact: As per Letter of Agreement.				
methods and delivery: Scheduled learning: hours Guided inde			Guided independ	ed independent study: hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = %, Practical E	xam	ninations = %, Cou	rsework = %	
	As used by St Andrews:				
	As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				
Module Co-ordinator:	As per Letter of Agreement.				

# CL4795 Joint Dissertation (60cr) SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules. Planned timetable: To be arranged.

The dissertation must consist of not more than 20,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Joint or Triple Honours in the School of Classics				
Pre-requisite(s):	A Letter of Agreement.	Anti-requisite(s):		Any other dissertation / project module	
Learning and teaching	Weekly contact: As per Letter of Agreement.				
methods and delivery:	Scheduled learning: hours	rning: hours Guided indepen		ndent study: hours	
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %				
	As used by St Andrews:				
	As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				
Module Co-ordinator:	As per Letter of Agreement.				

Lecturer(s)/Tutor(s):

#### **CL4990 Special Topic in Classical Studies** 1 **SCOTCAT Credits:** SCQF Level 10 Semester: Academic year: 2016/7 & 2017/8 **Availability restrictions:** Available only to students also taking ID4002. Planned timetable: To be arranged. This module is designed to complement ID4002 'Communication and Teaching in Arts & 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. Programme module type: Optional for Ancient History & Archaeology, and all Classical Studies or Classics Degrees, and Ancient History, Greek, Latin (Single and Joint, but excluding Three subject) Degrees Pre-requisite(s): Permission of the Classics Honours Anti-requisite(s): CL4999, GK4998, Adviser. GK4999, LT4999. Co-requisite(s): ID4002 Required for: Learning and teaching Weekly contact: 1-hour briefing in third year; 1-hour research training; 2 hours (in methods and delivery: total) of supervisory meetings. Scheduled learning: 4 hours Guided independent study: 146 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews: Coursework = 100% Re-Assessment pattern: Resubmission of the dissertation **Module Co-ordinator:** Dr R T Anderson

Individual supervisors assigned as required

#### CL4997 Dissertation (Non-Graduating) (30)

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Ancient History and Classical Studies Visiting Programmes		
Anti-requisite(s):	CL4996		
Learning and teaching methods and delivery:	Weekly contact: 1-hour research training; 4 hours (in total) of supervisory meetings.		
	Scheduled learning: 5 hours Guided independent study: 295 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practica	al Examinations = 0%, Coursework = 100%	
	As used by St Andrews:		
	Assessment is via home institution.		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	Dr E Gee		
Lecturer(s)/Tutor(s):	Individual supervisors assigned as required		

#### CL4999 Dissertation (Short) in Ancient History, Ancient History and Archaeology, or Classical Studies

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Available only to students in the second year of the Honours Programme.			
Planned timetable:	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).

Programme module type:	Compulsory for Ancient History, Classical	Studies Single Honours Degrees			
	Optional for Ancient History, Classical Studies Joint Degrees				
	HI4997, HI4998, CL4999 or with permissi	on HI4999 is compulsory for History			
Anti-requisite(s):	CL4998, CL4997, CL4996, CL4990, LT4999	9, GK4999, GK4998			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1-hour briefing in third year; 1 hour research training; 4 hours (in total) of supervisory meetings.				
	Scheduled learning: 6 hours Guided independent study: 294 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework (Dissertation) = 100%				
Re-Assessment pattern:	Resubmission of Dissertation				
Module Co-ordinator:	Dr E Gee				
Lecturer(s)/Tutor(s):	Individual supervisors assigned as require	ed			

### Classics - Honours Level - 2016/7 - August 2016 Greek (GK) modules

GK3021	GK3021 Greek for Honours Classics 1: Special Option					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	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.

Programme module type:	Compulsory for Single Honours Classics or Joint Honours Greek Degree students who passed GK1002 in their second year.				
Pre-requisite(s):	Passes at grade 11 or better in GK1002 and in LT2004  Anti-requisite(s): GK2003		GK2003		
Learning and teaching	Weekly contact: Induction in Orienta	tion	Week, then 3 or 4	l classes weekly.	
methods and delivery:	Scheduled learning: 41 hours Guided independent study: 259 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%				
	As used by St Andrews:				
	2-hour Written Examination = 40%, Coursework = 60% (essay, 20%, 43 class tests, 40%)				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr N Wiater				
Lecturer(s)/Tutor(s):	Team taught				

### **GK3022 Greek for Honours Classics 2: Special Option**

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Compulsory for Single Honours Classics or Joint Honours Greek Degree students who passed GK1002 in their second year.				
Pre-requisite(s):	GK3021	Anti-requisite(s): GK2004			
Learning and teaching	Weekly contact: 3 or 4 classes.				
methods and delivery:	Scheduled learning: 36 hours Guided independent study: 264 h				
Assessment pattern:	As defined by QAA: Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%  As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60% (essay, 20%,43 class tests, 40%)				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr N Wiater				
Lecturer(s)/Tutor(s):	Team taught				

### **GK4110 Imagining the Symposium**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2	
Academic year:	2016/7				
Planned timetable:	11.00 am - 1.00 pm Thu.				

This module will explore the symposium, a key cultural institution of the ancient Greek world, through its representation and dramatisation in both poetry and prose. The texts studied, which were produced for performance at symposia and/or designed to evoke the mentality and preoccupations (alcoholic, erotic, political, religious, and cultural) associated with sympotic gatherings, will range from the lyric and elegiac poetry of the archaic period, via the two Socratic Symposia of Plato and Xenophon in the fourth century, to the continued thematisation of the symposium in Hellenistic epigrams. The module will also make some supplementary use of pictorial evidence for the history of the symposium, paying comparative attention to the roles of poetic and visual material within symposiac culture.

Programme module type:	Optional for all Classics and Greek Degrees and Latin (Single and Joint, but excluding Three subject) Degrees			
Anti-requisite(s):	CL4503			
Learning and teaching	Weekly contact: 2 x 1-hour seminars and 1 coursework consultation hour.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	As used by St Andrews:			
	2-hour Written Examination = 40%, Unseen test = 15%, Coursework = 45%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Prof S Halliwell			
Lecturer(s)/Tutor(s):	Prof S Halliwell			

#### **GK4113 Greeks and Barbarians**

Greeks and Barbarians					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	11.00 am - 12.00 n	oon Tue and 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 Odyssey. 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' Life of Apollonius of Tyana.

Programme module type:	Optional for all Classics and Greek Degrees and Latin (Single and Joint, but excluding Three subject) Degrees		
Pre-requisite(s):	2 of GK2001, GK2002, GK2003, GK2004, including at least 1 grade 11 or above, OR GK3021 and GK3022		
Learning and teaching methods and delivery:	Weekly contact: Induction in Orientation Week then 2 hours of lectures and seminars, and 1 coursework consultation hour each week.		
	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%		
	As used by St Andrews:		
	2-hour Written Examination = 40%, Unseen test = 15%, Coursework = 45%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof J König		
Lecturer(s)/Tutor(s):	Prof J König		

#### **GK4117 Lies, History and Ideology**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	4.00 pm - 5.00 pm Tue and Thu.			

We shall examine stories about the Athenian past, particularly the myth of 'autochthony', according to which the Athenians' native land gave birth to their ancestors. We shall consider the role played by these stories in shaping Athenian civic identity; our focus will be on the sophisticated exploration of and response to these stories in Athenian literature, rhetoric and philosophy. An important theme discussed by these texts is the political expediency of telling falsehoods about the past. The set texts will be Euripides' lon, selected parts of Isocrates' political writing, Plato's Menexenus and selected parts of Plato's Republic.

Programme module type:	Optional for all Classics and Greek Degrees and Latin (Single and Joint, but excluding Three subject) Degrees			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction in Orientation Week then 2 hours of lectures and seminars, and 1 coursework consultation hour each week.			
	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	As used by St Andrews:			
	2-hour Written Examination = 40%, Unseen test = 15%, Coursework = 45%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Long			
Lecturer(s)/Tutor(s):	Dr A Long			

### GK4122 Wealth, Virture and Happiness from Homer to Aristotle SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 11.00 am - 12.00 noon Tue and Fri.

This module explores one of the most hotly debated topics in Greek literature from Homer down to Aristotle, namely the nature of wealth and its place in the good life. Is wealth a desirable good necessary for happiness? Or is it the underlying cause of greed, injustice, and civil unrest? Is there, or should there be, a limit in the acquisition of wealth? And how should wealth be used by those who possess it? In this module, we shall explore how different authors at different times and across different literary genres problematized the concept of wealth, its impact on communal life, and the way it relates to central ethical concepts such as virtue (arete), justice, and happiness (eudaimonia). We will study extended passages from a broad range of Greek texts such as Homer, Hesiod, Pindar, Solon, Aeschylus, and the philosophical works of Plato and Aristotle.

Programme module type:	Optional for all Classics and Greek Degrees and Latin (Single and Joint, but excluding Three subject) Degrees			
Pre-requisite(s):	of GK2001, GK2002, GK2003, GK2004, including at least 1 grade 11 or above, or GK3021 and GK3022, or equivalent standard of Greek.			
Anti-requisite(s):	CL4420			
Learning and teaching	Weekly contact:			
methods and delivery:	Scheduled learning: hours Guided independent study: hours			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	As used by St Andrews:			
	2-hour Written Examination = 40%, Coursework = 60%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr K Mantzouranis			
Lecturer(s)/Tutor(s):	Dr K Mantzouranis			

### GK4123 Narrating War in Graeco-Roman Antiquity: Herodotus, Thucydides, Polybius SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 3.00 pm - 4.00 pm Tue and Thu

War might not have been father of all, but it certainly was the father of large-scale Greek prose narrative and contributed to the development of Greek historical thought and narrative to an extent that can hardly be overestimated. In this module we will explore the narratives of three major Greek historical writers whose works set the standards and defined the genre for all generations to come.

The Histories of Herodotus, Thucydides and Polybius are of such complexity that each and every one of them could be approached from a variety of different angles. But since wars were the major concern of all of them and prompted them to write their works in the first place, it is this particular aspect on which we shall focus in class by studying selected passages from all three works in conjunction in the original language and reading some relevant articles and chapters of modern scholarship to put our discussions in class into a wider perspective.

Programme module type:	Optional for all Classics, Greek and Latin (Single and Joint, but excluding three-subject)Degrees		
Anti-requisite(s):	CL4406		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 x 1-hour seminar, plus 1 optional office hour and 1 additional weekly hour on set texts.		
	Scheduled learning: 22 hours Guided independent study: 278 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%		
	As used by St Andrews:		
	2-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr N Wiater		
Lecturer(s)/Tutor(s):	Dr N Wiater		

## GK4998 Dissertation in Greek (Long) SCOTCAT Credits: 60 SCQF Level 10 Semester: TBC Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the final year of the Single Honours Greek programme. Planned timetable: To be arranged.

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).

Programme module type:	Optional for Single Honours Greek Degrees		
Pre-requisite(s):	(GK2001 with GK2002) or (GK2003 with GK2004) - with a pass at grade 11 or better in at least one of these.		
Anti-requisite(s):	CL4999, CL4998, CL4997, CL4996, LT4999, GK4999, CL4990		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1-hour briefing in third year; 1-hour research training; 8 hours of supervisory meetings.		
	Scheduled learning: 10 hours Guided independent study: 590 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework (Dissertation) = 100%		
Re-Assessment pattern:	Resubmission of Dissertation		
Module Co-ordinator:	Dr E Gee		
Lecturer(s)/Tutor(s):	Individual supervisors assigned as require	ed	

**Re-Assessment pattern:** 

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

#### **GK4999 Dissertation in Greek SCOTCAT Credits:** SCQF Level 10 1 or 2 30 Semester: Academic year: 2016/7 & 2017/8 **Availability restrictions:** Available only to students in the second year of the Honours Programme. Planned timetable: 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 Coordinator. The dissertation will be completed within one semester, and the maximum length is 10,000 words (see module booklet for details). Programme module type: Optional for all Classics and Greek (except Single Honours) Degrees Pre-requisite(s): 2 of GK2001, GK2002, GK2003, GK2004, including at least 1 grade 11 or above, OR GK3021 and GK3022 CL4999, CL4998, CL4997, CL4996, GK4998, LT4999, CL4990 Anti-requisite(s): Learning and teaching Weekly contact: 1-hour briefing in third year; 1-hour research training; 4 hours (in methods and delivery: total) of supervisory meetings. Scheduled learning: 6 hours Guided independent study: 294 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews:

Coursework (Dissertation) = 100%

Individual supervisors assigned as required

Resubmission of Dissertation

Dr E Gee

### Latin (LT) modules

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

Dr E Gee

Team taught

LT3017	.7 Latin for Honours Classics 1					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:					
	Planned timetable:	2.00 pm - 3.00 pm	Tue,Thu and Fri			
	second year with LT1001 and consists of the whole of the additional piece of Honours-	who, having taken Greek in both of their first two years, but only begun Latin in their and LT1002, are entering Honours Classics or joint Honours Latin in their third year. It is 20-credit LT2003 module, with some additional set text reading in Latin and an s-level assessment. The module is assessed by one Honours-level essay (30%), one class tests (10%) and an end-of-semester exam (40%).				
	Programme module type:	Compulsory for Single Honours Classics or Joint Honours Latin Degree students who passed LT1002 in their second year.				
	Pre-requisite(s):	Passes at grade 11 or better in LT1002 and in GK2004.				
	Anti-requisite(s):	LT2003 Required for: LT3018, LT4203				
	Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 - 4 meetings per week plus attendance at selected 4000-level LT seminars.				
		Scheduled learning: 47 hours Guided independent study: 253 hours				
	Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
		As used by St Andi 2-hour Written Exa 20%; 2 class tests,	amination = 40%, Co	oursework (1 essay, 3	0%; 1 literary criticism,	
	Re-Assessment pattern:	3-hour Written Examination = 100%				

atin for Honours Classics 2					
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8			
Planned timetable:	2.00 pm - 3.00 pm	Tue,Thu and Fri			
second year with LT1001 and	s who, having taken Greek in both of their first two years, but only begun Latin in their and LT1002, are entering Honours Classics or joint Honours Latin in their third year. It he 20-credit LT2004 module, with some additional set text reading in Latin and an s-level assessment.				
Programme module type:	Compulsory for Single Honours Classics or Joint Honours Latin Degree students who passed LT1002 in their second year.				
Pre-requisite(s):	LT3017		Anti-requisite(s):	LT2004	
Learning and teaching methods and delivery:	Weekly contact: 2 - 4 meetings per week plus attendance at selected 4000-level LT seminars.				
	Scheduled learning: 47 hours Guided independent study: 253 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	2-hour Written Examination = 40%; Coursework = 60% (1 essay, 30%; 1 literary criticism, 20%; 1 class test, 10%)				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr A König				
Lecturer(s)/Tutor(s):	Team taught				

Roman Epic				
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	11.00 am - 1.00 pm	n 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.				
Programme module type:	· ·	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees		
Pre-requisite(s):	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018			
Learning and teaching methods and delivery:	Weekly contact: Induction in Orientation Week then 1 x 2-hour seminar and 1 coursework consultation hour each week.			
	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%			
	As used by St Andrews:  Coursework = 60% (2 commentaries, 30%; essay, 15%, class test, 15%), 2-hour Written Examination = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr E Buckley			
Lecturer(s)/Tutor(s):	Dr E Buckley, Dr E R G Gee			

### LT4203 Latin Prose Composition SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 12.00 noon - 1.00 pm Tue and 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.

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Programme module type:	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees		
Pre-requisite(s):	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018		
Learning and teaching	Weekly contact: 2 seminars and 1 coursework consultation hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews:		
	Coursework = 60% (2 class tests, 30% each), 2-hour Written Examination = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr J Coderch		
Lecturer(s)/Tutor(s):	Dr J Coderch		

LT4207 Roman Comedy					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	9.00 am - 11.00 am Fri.			

The module aims to delve into the comic world of the Latin playwrights Plautus and Terence and its cultural background. At the beginning of its political rising in the Mediterranean, when Rome was still, from a cultural point of view, a provincial Hellenistic city, the comic genre became one of the fields in which the new-born literature took its first steps, trying to keep pace with its other more sophisticated rivals. The names of Plautus and Terence emerge from that time and their plays form a corpus which is only slightly smaller than that of the Homeric poems. Key topics that will be considered in the analysis of this variegated theatrical universe are: the relation with the Greek originals and its problems; the influence of other cultural traditions, such as the Italic and the Hellenistic, and their interaction with the more distinctive elements of Roman culture; the comparison between Plautus and Terence; the impact of historical events such as the victory over Cartago, Pergamum and Greece; genre conventions, stock-characters and their subversion. The module will also examine the reception of comedy in later Latin literature, and its influence on the history of western theatre and culture.

Programme module type:	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees		
Anti-requisite(s):	CL4403		
Learning and teaching	Weekly contact: 2 x 1-hours seminar and 1 coursework consultation hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 55%, Practical Examinations = 0%, Coursework = 45%		
	As used by St Andrews:		
	2-hour Written Examination = 40%, Coursework = 60% (2 source criticisms 30%; essay 15%; class test 15%)		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr G Pezzini		
Lecturer(s)/Tutor(s):	Dr G Pezzini		

LT4211	Latin Letters						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1		
	Academic year:	2016/7					
	Planned timetable:	11.00 am - 12.00 noon Tue and Thu.					
	Seneca and Pliny. The aims, m	re of epistolography through the selected letters of the three Latin writers Cicero, eethods, style and subject-matter of each writer will be studied and compared, as will cal and cultural backgrounds. Letters from other authors and periods will be used for					
	Programme module type:	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees					
	Learning and teaching methods and delivery:	•	duction in Orientation tation hour each we		rs of classes and 1		
		Scheduled learning	g: 22 hours	Guided independ	dent study: 278 hours		
	Assessment pattern:	As defined by QAA	<b>:</b>				
		Written Examination	ons = 55%, Practical E	xaminations = 0%, (	Coursework = 45%		
		As used by St Andrews:					
		2-hour Written Examination = 40%, Coursework = 60% (1 essay, 15%, 2 commentaries, 30%, 1 class-test, 15%)					
	Re-Assessment pattern:	3-hour Written Examination = 100%					
	Module Co-ordinator:	Dr A König					

LT4214 Latin Philosophical Writing							
	SCOTCAT Credits: 30 SCQF Level 10 Semester: 2						
	Academic year: 2016/7						
	Planned timetable: 10.00 am - 12.00 noon Wed.						

Dr A König, Dr M Lavan, Dr R Rees

Lecturer(s)/Tutor(s):

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.

Programme module type:	Optional for all Classics and Latin Degrees and Greek (Single and Joint, but excluding Three subject) Degrees				
Pre-requisite(s):	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018				
Learning and teaching	Weekly contact: 1 x 2-hour seminar and 1 coursework consultation hour.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 55%, Practical Ex	aminations = 0%, Coursework = 45%			
	As used by St Andrews:				
	2-hour Written Examination = 40%, Coursework = 60%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr E R G Gee				
Lecturer(s)/Tutor(s):	Dr E R G Gee				

LT4219 Roman Biography	19 Roman Biography						
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1			
Academic year:	2016/7	2016/7					
Planned timetable:	10.00 am - 11.00 am Tue and Thu						
texts, such as Nepos, Suetor	unity for close reading of representative examples of classical Latin biographical us and the Historia Augusta, in the original Latin. Apart from promoting accurate le's emphasis will be on their literary qualities.						
Programme module type:	Optional for for MA single or joint honours in Latin or Classics.						
Pre-requisite(s):	LT2001 and LT2002 OR LT2003 and LT2004						
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Induction in Orientation Week then 1 x 2-hour seminar and 1 coursework consultation hour each week.						
	Scheduled learning	<b>g:</b> 33 hours	Guided indepen	dent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%						
	As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60%						
Re-Assessment pattern:	3-hour Written Examination = 100%						
Module Co-ordinator:	Dr T Geue						
Lecturer(s)/Tutor(s):	Team taught						

Latin Lyric							
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2			
Academic year:	2016/7	4.00 pm - 5.00 pm Tue and Thu.  approach to the two most metrically versatile poets of the late Republic and early he module will follow prescribed poems from both authors, organised into themes,					
Planned timetable:	4.00 pm - 5.00 p						
	The module will						
Programme module type:	Optional for MA single or joint Honours in Latin, Classics and Greek.  Weekly contact: 2 x 1-hour seminars, and 1 coursework consultation hour.						
Learning and teaching							
methods and delivery:	Scheduled lear	ning: hours	Guided indep	endent study: hours			
Assessment pattern:	As defined by 0	As defined by QAA:					
	Written Examin	ations = 55%, Practica	l Examinations = 0	%, Coursework = 45%			
	As used by St A	ndrews:					
	2-hour Written Examination = 40%, Coursework (including unseen translation test 15%) = 60%  3-hour Written Examination = 100%						
Re-Assessment pattern:							
Module Co-ordinator:	Dr R Rees	Dr R Rees Dr R Rees, Dr N Waiter					

# LT4999 Latin Dissertation SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in second year of the Honours Programme. Planned timetable: 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).

Programme module type:	Optional for all Classics and Latin Degrees					
Pre-requisite(s):	2 of LT2001, LT2002, LT2003, LT2004, including at least 1 grade 11 or above, OR LT3017 and LT3018	l, including at least 1 grade bove, OR LT3017 and		CL4999, CL4998, CL4997, CL4996, GK4999, GK4998, CL4990		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1-hour briefing in third year; 1-hour research training; 4 hours (in total) of supervisory meetings.					
	Scheduled learning: 6 hours	Guided independent study: 294 hours				
Assessment pattern:	As defined by QAA:					
	Written Examinations = 0%, Practical	Exa	minations = 0%, C	oursework = 100%		
	As used by St Andrews:					
	Coursework (Dissertation) = 100%					
Re-Assessment pattern:	Resubmission of Dissertation					
Module Co-ordinator:	Dr E Gee					
Lecturer(s)/Tutor(s):	Individual supervisors assigned as rec	quire	ed			

### **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**

Software Engineering								
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1				
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8						
Planned timetable:	To be arranged.	To be arranged.						
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.								
Programme module type:	Compulsory for 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							
Pre-requisite(s):	(CS2001 or CS210	1) and CS2002						
Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 wee	ks) and fortnightly	tutorial.				
memous and denvery.	Scheduled learning	ng: 28 hours	Guided indepen	ndent study: 122 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%  As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%							
Re-Assessment pattern:	2-hour Written Ex	amination = 60%, E	xisting Coursework	= 40%				
Module Co-ordinator:	hons-coord-cs@st	-andrews.ac.uk						

## CS3052 Computational Complexity SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

This module introduces Turing machines, non-determinism and pushdown automata, followed by study of decidability, simulation and the Halting problem. It builds upon finite state machines, context-free grammars and big-O notation from second year. 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.

Programme module type:	Compulsory for Computer Science BSc, Joint Computer Science degrees with subjects other than Psychology with BPS Recognition, Computer Science MSci				
	Optional for Computer Science and Psy	chology with BPS Recognition BSc			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002				
Required for:	CS4052, CS4204				
Learning and teaching	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.				
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%				
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk				

### **CS3098 Minor Software Team Project**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Not available to General Degree Students.				
Planned timetable:	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. This module has a similar structure to CS3099, but with reduced scope appropriate for Joint Honours students.

Programme module type:	Compulsory for Computer Science Joint Honours Degrees.					
Pre-requisite(s):	(CS2001 or CS2101) and CS2002	Anti-requisite(s):	CS3099			
Required for:	CS4098					
Learning and teaching methods and delivery:	Weekly contact: Lectures, supervisor meetings and demonstrations arranged as necessary					
	Scheduled learning: 69 hours Guided independent study: 81 hours					
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	No Re-Assessment available					
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk					

#### **CS3099 Major Software Team Project SCOTCAT Credits:** SCQF Level 9 Whole Year Semester: Academic year: 2016/7 & 2017/8 **Availability restrictions:** Not available to General Degree Students Planned timetable: 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. Programme module type: Compulsory for Computer Science BSc, Computer Science MSci Pre-requisite(s): (CS2001 or CS2101) and CS2002 Anti-requisite(s): CS3098 Required for: CS4099 Learning and teaching Weekly contact: Lectures, supervisor meetings and demonstrations arranged methods and delivery: as necessary. Scheduled learning: 69 hours Guided independent study: 231 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews:

Coursework = 100%

No Re-Assessment available

hons-coord-cs@st-andrews.ac.uk

Re-Assessment pattern:

**Module Co-ordinator:** 

CS3101

Databases	Databases							
SCOTCAT Credits:	15	SCQF Level 9	Semester:	2				
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8						
Planned timetable:	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.								
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci							
Pre-requisite(s):	(CS2001 or CS210	1) and CS2002						
Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 wee	ks) and fortnightly	tutorial.				
memous and denvery.	Scheduled learning	ng: 28 hours	Guided indeper	ndent study: 122 hours				
Assessment pattern:	As defined by QA	A:	•					
	Written Examinat	ions = 60%, Practica	al Examinations = 09	%, Coursework = 40%				
	As used by St Andrews:							
	2-hour Written Examination = 60%, Coursework = 40%							
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%							
Module Co-ordinator:	hons-coord-cs@st	t-andrews.ac.uk						

02 Data Communications and Networks							
SCOTCAT Credits:	15	SCQF Level 9	Semester:	2			
Academic year:	2016/7 & 2017/8						
Planned timetable:	To be arranged.	To be arranged.					
This module introduces the protocols and architectures.	basics of data communications and computer networks, and examines network						
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci						
Pre-requisite(s):	(CS2001 or CS2101), CS2002 and CS2003 Anti-requisite(s): CS5021						
Required for:	CS4103, CS4302						
Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 we	eks) and fortnightly	tutorial.			
moundas and denvery.	Scheduled learning	ng: 28 hours	Guided indeper	ndent study: 122 hours			
Assessment pattern:	As defined by QA	A:					
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%						
	As used by St Andrews:						
	2-hour Written Examination = 60%, Coursework = 40%						
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%						
Module Co-ordinator:	hons-coord-cs@st	t-andrews.ac.uk					

Operating Systems					
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	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.					
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	(CS2001 or CS2101) and CS2002				
Required for:	CS4202, CS4204				
Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 wee	ks) and fortnightly	tutorial.	
memous and deniety.	Scheduled learning	ng: 28 hours	Guided indepen	ndent study: 122 hour	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%				
Module Co-ordinator:	hons-coord-cs@st	t-andrews.ac.uk	hons-coord-cs@st-andrews.ac.uk		

CS3105	05 Artificial Intelligence					
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	To be arranged.				
		eneral features of the A.I. problem solving process, and in particular the various with their implementation and case studies of real systems.				
	Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
	Pre-requisite(s):	(CS2001 or CS2101) and CS2002				
	Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 wee	eks) and fortnightly	tutorial.	
	memous and deniety.	Scheduled learning	g: 28 hours	Guided indepen	dent study: 122 hours	
	Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
		As used by St And	rews:			
		2-hour Written Examination = 60%, Coursework = 40%				
	Re-Assessment pattern:	2-hour Written Ex	amination = 60%, E	xisting Coursework	= 40%	
	Module Co-ordinator:	hons-coord-cs@st	-andrews.ac.uk			

Human Computer Intera	action					
SCOTCAT Credits:	15	SCQF Level 9	S	Semester:	1	
Academic year:	2016/7 & 2017/8	<u> </u>				
Planned timetable:	To be arranged.					
This module covers the mai methods and standards are experience of current intera	studied, and pract	ice is given in imp	olen	nentation and ev	,	
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci					
Pre-requisite(s):	(CS2001 or CS210	1) and CS2002	An	ti-requisite(s):	CS5040	
Learning and teaching methods and delivery:	Weekly contact: 2	2 lectures (x 11 we	eks	) and fortnightly	tutorial.	
methous and delivery.	Scheduled learning	ng: 28 hours		Guided indeper	endent study: 122 hours	
Assessment pattern:	As defined by QAA:  Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%					
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%					
Module Co-ordinator:	hons-coord-cs@s	t-andrews.ac.uk	hons-coord-cs@st-andrews.ac.uk			

Planned timetable:

### CS3301 Component Technology SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8

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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	(CS2001 or CS2101), CS2002 and CS2003				
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.				
memous and denvery.	Scheduled learning: 28 hours Guided independent study: 122 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Practical	Examinations = 0%, Coursework = 40%			
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%				
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk				

Data Encoding						
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	To be arranged.	To be arranged.				
This module explains the te error correcting capabilities,	echniques used to encode data, emphasising the ideas of security and secrecy, , and data compression.					
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci					
Pre-requisite(s):	(CS2001 or CS2101) and CS2002					
Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 wee	ks) and fortnightly	tutorial.		
memous and activery.	Scheduled learning	ig: 28 hours	Guided indeper	ndent study: 122 hours		
Assessment pattern:	As defined by QA	A:				
	Written Examinat	ions = 60%, Practica	I Examinations = 0	%, Coursework = 40%		
	As used by St Andrews:					
	2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%					
Module Co-ordinator:	hons-coord-cs@st	-andrews.ac.uk				

### CS4052 Logic and Software Verification SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8

To be arranged.

Planned timetable:

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.

Programme module type:	Compulsory for 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			
Pre-requisite(s):	CS3052			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.			
methous and denvery.	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 60%, Exi	2-hour Written Examination = 60%, Existing Coursework = 40%		
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk			

<b>CS4098 Minor Software Project</b>					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				
This module has the same students.	e content as CS4099, but with reduced scope appropriate for Joint Honours				
Programme module type:	Compulsory for Joint Computer Science degrees.				
Pre-requisite(s):	CS3098		Anti-requisite(s):	CS4099, CS4796	
Learning and teaching methods and delivery:	Weekly contact: I	ndividual supervisi	on		
methods and denvery.	Scheduled learning	ng: 69 hours	Guided indepen	dent study: 81 hours	
Assessment pattern:	As defined by QA	A:			
	Written Examinat	ions = 0%, Practica	Examinations = 0%	, Coursework = 100%	
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	No Re-Assessmen	t available			
Module Co-ordinator:	hons-coord-cs@st	t-andrews.ac.uk			

### **CS4099 Major Software Project**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Compulsory for Computer Science BSc, Computer Science MSci					
Pre-requisite(s):	CS3099	Ant	ti-requisite(s):	CS4098, CS4796		
Learning and teaching methods and delivery:	Weekly contact: Individual supervision.					
meanous and denietry.	Scheduled learning: 69 hours Guided independent study: 231 hour					
Assessment pattern:	As defined by QAA:					
	Written Examinations = 0%, Practical	al Exa	aminations = 0%	, Coursework = 100%		
	As used by St Andrews:					
	Coursework = 100%					
Re-Assessment pattern:	No Re-Assessment available					
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk					

### **CS4102 Computer Graphics**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.			
	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical	Examinations = 0%, Coursework = 40%		
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk			

CS4103	3 Distributed Systems						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	To be arranged.	To be arranged.				
		undamentals of distributed systems, with reference to system models, orithmic techniques, concurrency and correctness.					
	Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci					
	Pre-requisite(s):	CS3102					
	Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 wee	ks) and fortnightly	tutorial.		
	memous and denvery.	Scheduled learning	ng: 28 hours	Guided indeper	ndent study: 122 hours		
	Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%					
		As used by St Andrews:					
		2-hour Written Examination = 60%, Coursework = 40%					
	Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%					
	Module Co-ordinator:	hons-coord-cs@st	:-andrews.ac.uk				

201 Programming Language	Design and Imp	lementation			
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				
This module studies the de design principles, abstract encapsulation, exceptions, machine design, run-time sy	syntax, evaluation formal definition	mechanisms, bind of programming la	ding, type systems	s, polymorphism, data	
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	(CS2001 or CS210	1) and CS2002			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.				
methods and delivery.	Scheduled learning	ng: 28 hours	Guided indepen	ident study: 122 hours	
Assessment pattern:	As defined by QA	A:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Ex	amination = 60%, E	xisting Coursework	= 40%	
Module Co-ordinator:	hons-coord-cs@st	-andrews.ac.uk			

<b>Computer Architecture</b>					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				
This module studies the pemphasis on performance aperformance concepts and performance concepts	and acceleration. T	opics include the (			
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	CS3104				
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.				
methous and denvery.	Scheduled learning	earning: 28 hours Guided independent study:		ndent study: 122 hours	
Assessment pattern:	As defined by QA Written Examinat		al Examinations = 0	%, Coursework = 40%	
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Ex	amination = 60%, E	xisting Coursework	x = 40%	
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk				

Computer Security					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				
This module introduces the defences against them, and	·	·		, common attacks and	
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	(CS2001 or CS210	1) and CS2002	Anti-requisite(s):	IS5104	
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.				
inethous and delivery.	Scheduled learning: 28 hours		Guided independent study: 122 hours		
Assessment pattern:	As defined by QA	A:	·		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%				
Module Co-ordinator:	hons-coord-cs@st	-andrews.ac.uk			

#### **CS4204 Concurrency and Multi-Core Architectures SCOTCAT Credits:** SCQF Level 10 2 15 Semester: Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged. 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. Programme module type: Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci Pre-requisite(s): CS3052 and CS3104 Learning and teaching Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial. methods and delivery: Guided independent study: 122 hours Scheduled learning: 28 hours Assessment pattern: As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40% As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40% Re-Assessment pattern: 2-hour Written Examination = 60%, Existing Coursework = 40% **Module Co-ordinator:** hons-coord-cs@st-andrews.ac.uk

CS4302

Multimedia						
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	To be arranged.					
This module introduces the manipulating, compressing, well as their connection wit issues and solutions involved	and transmitting rand that is and the second in the second	nedia based on tex on. Within the cont	kt, audio, images, a ext of networked i	and moving images, as multimedia, it presents		
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci					
Pre-requisite(s):	CS3102					
Learning and teaching methods and delivery:	Weekly contact: 2	lectures (x 11 wee	ks) and fortnightly	tutorial.		
memous and deniety.	Scheduled learning	ng: 28 hours	Guided indepen	dent study: 122 hours		
Assessment pattern:	As defined by QA	A:				
	Written Examinat	ions = 60%, Practica	I Examinations = 09	%, Coursework = 40%		
	As used by St Andrews:					
	2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%					
р	hons-coord-cs@st-andrews.ac.uk					

#### **CS4303 Video Games**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.			
	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical E	xaminations = 0%, Coursework = 100%		
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk			

#### **CS4402 Constraint Programming**

- constraint rogramming	<b>5</b>			
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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 modern solver.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and fortnightly tutorial.			
meanous and denvery.	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical	Examinations = 0%, Coursework = 40%		
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk			

#### **CS4499 Computer Science (Special Subject) SCOTCAT Credits:** SCQF Level 10 Semester: 1 or 2 2016/7 & 2017/8 Academic year: Planned timetable: 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. Programme module type: Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci Pre-requisite(s): The consent of the Head of School Learning and teaching Weekly contact: 1-hour supervision meeting. methods and delivery: Scheduled learning: 11 hours Guided independent study: 139 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews: Coursework = 100% Re-Assessment pattern: No Re-Assessment available **Module Co-ordinator:** hons-coord-cs@st-andrews.ac.uk

Joint Project (30cr)					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	have completed t		nent. No student m	ours Programme, who ay do more than 60	
Planned timetable:	To be arranged.				
The aim of the project is t management and analysis. supervisors in order to de preparation.	The topic and are	ea of research sho	ould be chosen in	consultation with the	
Programme module type:	Optional for Joint Honours in the School of Computer Science.				
Pre-requisite(s):	A Letter of Agreer	Letter of Agreement Anti-requisite(s):		CS4098, CS4099, More than 30 credits in other dissertation / project modules	
Learning and teaching methods and delivery:	Weekly contact: A	As per Letter of Agr	eement.		
methods and denvery.	Scheduled learning	ng: hours Guided indepe		ndent study: hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	No Re-Assessmen	t available			
	As per Letter of Agreement.				

# CS5010 Artificial Intelligence Principles SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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: logical reasoning, reasoning in the presence of uncertainty, and machine learning. It shows how search is used to solve a variety of problems in AI. 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.

	I				
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	(CS2001 or CS2101) and CS2002	Anti-requisite(s):	CS3105		
Required for:	CS5011				
Learning and teaching methods and delivery:	Weekly contact: Lectures, seminars, tutorials and practical classes.				
methods and denvery.	Scheduled learning: 25 hours	Guided indeper	dent study: 125 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%				
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.ul	ζ			

55011 Artificial Intelligence Pra	actice						
SCOTCAT Credits:	15	SCQF Level 11	Semester:	1			
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8					
Planned timetable:	To be arranged.						
This module covers practica in AI technique, covering technique, shown how to implement AI	chniques in the are	as of AI reasoning,	planning, doing, ar	nd learning. Finally, it is			
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci						
Pre-requisite(s):	Students must have passed CS3105 or CS5010, or be currently taking CS5010						
Learning and teaching methods and delivery:	Weekly contact: Lectures, seminars, tutorials and practical classes.						
methods and denvery.	Scheduled learning: 25 hours Guided independent study:			ndent study: 125 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%						
Re-Assessment pattern:	No Re-Assessmen	t available					
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk						

			T		
SCOTCAT Credits:	15	SCQF Level 11	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				
This module covers the maj computational syntax, comrecognition.					
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	CS3052 or CS5010	)			
Learning and teaching methods and delivery:	Weekly contact: L	ectures, seminars,	tutorials and pra	ctical classes.	
	Scheduled learning	ng: 25 hours	Guided indep	endent study: 125 hours	
Assessment pattern:	As defined by QA	A:			
	Written Examinat	ions = 60%, Practic	al Examinations =	0%, Coursework = 40%	
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
	2-hour Written Examination = 60%, Existing Coursework = 40%				
Re-Assessment pattern:	2-lioui writtell Ex		Existing Course We	1 TO 70	

Advanced Networks					
SCOTCAT Credits:	15	SCQF Level 11	Semester:	1	
Academic year:	2016/7		•		
Planned timetable:	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.					
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	(CS2001 or CS210	1) and CS2002	Anti-requisite(s):	CS3102	
Required for:	CS5023, CS5029				
Learning and teaching methods and delivery:	Weekly contact: Weekly lectures, seminars, tutorials and practical classes.				
memous and denvery.	Scheduled learning: 25 hours Guided independent study: 125 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%				
	As used by St Andrews:  2-hour Written Examination = 40%, Coursework = 60%				
Re-Assessment pattern:	2-hour Written Examination = 40%, Existing Coursework = 60%				
Module Co-ordinator:	masters-coord-cs(	@st-andrews.ac.uk			

Mobile and Wireless Networks					
SCOTCAT Credits:	15	SCQF Level 11	Semester:	2	
Academic year:	2016/7				
Planned timetable:	To be arranged.				
heterogeneous environmer	nines how computing and communication are used to allow mobile systems to function in environments, with variations in available network resources and diverse/intermittent ivity. A key outcome of the module is for students to be able to critically assess the constraints of mobile systems.				
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci				
Pre-requisite(s):	CS3102 or CS5021				
Learning and teaching methods and delivery:	Weekly contact: \	Weekly lectures, se	minars, tutorials ar	nd practical classes.	
methods and delivery.	Scheduled learning: 25 hours Guided independent study: 125				
Assessment pattern:	As defined by QA	A:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%				
Module Co-ordinator:	masters-coord-cs	@st-andrews.ac.uk			

CS5030 Software Engineering P	30 Software Engineering Principles					
SCOTCAT Credits:	15	SCQF Level 11	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	To be arranged.					
is explored, along with the	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.					
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci					
Pre-requisite(s):	(CS2001 or CS2101) and CS2002					
Learning and teaching methods and delivery:	Weekly contact: L	ectures, seminars,	tutorials and practi	cal classes.		
ccus unu uenvery.	Scheduled learning	ng: 25 hours	Guided indeper	ndent study: 125 hours		
Assessment pattern:	As defined by QAA:					
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%					
	As used by St Andrews:					
	2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%					
Module Co-ordinator:	masters-coord-cs(	@st-andrews.ac.uk				

# CS5031 Software Engineering Practice SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002			
Required for:	CS5032, CS5033, CS5039			
Learning and teaching	Weekly contact: Weekly lectures, seminars, tutorials and practical classes.			
methods and delivery:	Scheduled learning: 25 hours Guided independent study: 125 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk			

Planned timetable:

# CS5032 Critical Systems Engineering SCOTCAT Credits: 15 SCQF Level 11 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002			
Learning and teaching	Weekly contact: Weekly lectures, seminars, tutorials and practical classes.			
methods and delivery:	Scheduled learning: 25 hours Guided independent study: 125 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk			

CS5033	Software Architecture				
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	2
	Academic year:	2016/7 & 2017/8			

To be arranged.

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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Pre-requisite(s):	CS3051 or CS5031			
Learning and teaching methods and delivery:	Weekly contact: Lectures, seminars, tutorials and practical classes.			
	Scheduled learning: 25 hours Guided independent study: 125 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk			

# CS5040 Human Computer Interaction Principles and Methods SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

This module provides a grounded introduction to the principles of human computer interaction in the context of evaluation paradigms. Material includes: history of interfaces and interaction; the human (vision, perception, memory, hearing); the computer (from existing to next generation ubiquitous computing systems); paradigms of interaction; evaluation paradigms in HCI; guidelines and heuristics; experimental design and hypothesis testing in HCI; quantitative evaluation methods in HCI; qualitative evaluation methods in HCI.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science Msci				
Pre-requisite(s):	(CS2001 or CS2101) and CS2002				
Learning and teaching methods and delivery:	Weekly contact: Lectures, practical classes and tutorials.				
The state of the s	Scheduled learning: 41 hours Guided independent study: 109 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%				
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.u	k			

S5041 Interactive Software an	Interactive Software and Hardware					
SCOTCAT Credits:	15	15 SCQF Level 11 Semester: 1				
Academic year:	2016/7 & 2017/8					
Availability restrictions:	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.					
Planned timetable:	To be arranged.					
This module develops proto how to create interactive h mobile devices, microproces	nardware and softw	are using technologic	ogies such as tang	ible programming kits,		
Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci					
Pre-requisite(s):	(CS2001 or CS2101) and CS2002					
Learning and teaching	Weekly contact: L	ectures, practical c	lasses and tutorials			
methods and delivery:	Scheduled learning: 66 hours Guided independent study: 84 hours					
Assessment pattern:	As defined by QA	<b>A</b> :	•			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	No Re-Assessment available					
Module Co-ordinator:	masters-coord-cs(	@st-andrews.ac.uk				

# SCOTCAT Credits: 15 SCQF Level 11 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: 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. Planned timetable: 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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science Msci			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002			
Learning and teaching	Weekly contact: 2 lectures, 3 practicals and 1 tutorial.			
methods and delivery:	Scheduled learning: 66 hours Guided independent study: 84 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%			
	As used by St Andrews: Coursework = 85%, Presentation = 15%			
Re-Assessment pattern:	No Re-assessment available			
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk			

### **CS5044 Information Visualisation and Visual Analytics**

SCOTCAT Credits:	15	SCQF Level 11	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				

This module provides an introduction to information visualisation and visual analytics. It focuses on the question of how to utilise visual representations to make information accessible for exploration and analysis. The module covers basic principles of visualisation design and interaction principles. It introduces a range of visualisation techniques and tools, and discusses how these can be effectively applied in various scenarios for communication, exploration and analysis, and how to evaluate information visualisations in different contexts. Skills in designing, developing, and evaluating information visualisations are reinforced through practical assignments. There are no pre-requisites for this module but students should have basic programming skills (e.g. in Java or JavaScript).

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Pre-requisite(s):	(CS2001 or CS2101) and CS2002			
Learning and teaching	Weekly contact: 3-hour lecture (x 11 weeks), 1-hour seminar (x 8 weeks)			
methods and delivery:	Scheduled learning: 41 hours Guided independent study: 109 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	As used by St Andrews:			
	2-hour Written Examination = 40%, Coursework = 60%			
Re-Assessment pattern:	2-hour Written Examination = 40%, Existing Coursework = 60%			
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk			

### **CS5052 Data-Intensive Systems**

SCOTCAT Credits:	15	SCQF Level 11	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

The era of big data is upon us - the volume, velocity and variety of enterprise and scientific data are growing at an exponential rate and will continue to do so for the foreseeable future. This module presents the programming paradigms, algorithmic techniques and design principles for large-scale distributed systems, such as those utilised by companies such as Google, Amazon and Facebook. This module is different in scope from CS4103 (distributed systems) as it focuses primarily on building and utilising large-scale clusters.

The module will cover: distributed systems architecture, replication and fault tolerance, storage, coordination, scheduling algorithms, cluster computing, cloud computing, virtualisation, programming models (e.g., MapReduce), stream processing, decentralised systems (e.g., Chord), incentive-based systems (e.g., BitTorrent), and social computing (e.g., crowd sourcing techniques). This module will draw from the latest research in both academia and industry.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci		
Pre-requisite(s):	CS5001		
Learning and teaching methods and delivery:	Weekly contact: 3 hours of lectures (x 11 weeks), 1-hour seminar (x 4 weeks), 1-hour practical class (x 3 weeks)		
	Scheduled learning: 40 hours Guided independent study: 110 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:  2-hour Written Examination - 60%, Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%		
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk		

#### **CS5199 Individual Masters Project**

SCOTCAT Credits:	60	SCQF Level 11	Semester:	1 & 2 (taught twice)
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Compulsory for MSci Honours Computer Science		
Pre-requisite(s):	CS4099, Entry to MSci Honours Computer Science		
Learning and teaching methods and delivery:	Weekly contact: Individual supervision.		
methods and denvery.	Scheduled learning: 45 hours Guided independent study: 555 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	hons-coord-cs@st-andrews.ac.uk		

### ID5059 Knowledge Discovery and Datamining SCOTCAT Credits: 15 SCQF Level 11 Semester: 2 Planned timetable: 11.00 am Mon (odd weeks), Wed and Fri

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 programming (typically R, SAS or python).

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees,			
,,	Computer Science MSci			
Anti-requisite(s):	MT5759			
Learning and teaching	Weekly contact: Lectures, seminars, tutorials and practical classes.			
methods and delivery:	Scheduled learning: 35 hours Guided independent study: 115 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk			

### **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

Reading in Reformation and Early Modern Theology					
SCOTCAT Credits:	15 SCQF Level 9 Semester: 1				
Academic year:	2016/7 & 2017/	8			
Planned timetable:	Lecture 11.00 am - 12.00 noon Tue, Seminar 11.00 am - 1.00 pm Thu (Classes held in Weeks 7-11 essay submitted in week 12) - Provisional				
these in the context of histor language. Texts will be stud developments and conflicts	e study of key texts of Reformation and counter-Reformation theology, setting orical developments and noting the development of key theological themes and idied chronologically, with attention paid to their contexts in the ecclesiastical its of the early modern period, as well as to their formative influence on the will be expected to read broadly in the primary texts, with specific readings on.				
Programme module type:	Compulsory for MTheol, BD, and Single Honours Theological Studies Optional for Joint Honours Theological Studies				
Pre-requisite(s):	DI2000				
Co-requisite(s):	DI3704				
Learning and teaching	Weekly contact	1 x 1-hour lecture	and 1 x 2-hour sem	inar (x 5 weeks).	
methods and delivery:	Scheduled learn	ing: 15 hours	Guided indepen	dent study: 135 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews:				
Do Accessment mattern.	Coursework = 100%  2-hour Written Examination = 100%				
Re-Assessment pattern:  Module Co-ordinator:	Dr J Wolfe				
Lecturer(s)/Tutor(s):	Dr J Wolfe				

### DI3704 Reading in Theological Ethics

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	Lecture 11.00 am - 12.00 noon Tue, Seminar 11.00 am - 1.00 pm Thu (Classes held in Weeks 1 - 5 essay submitted in week 6) - Provisional			

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

Programme module type:	Compulsory for MTheol, BD, and Single Honours Theological Studies Optional for Joint Honours Theological Studies			
Pre-requisite(s):	DI2000	DI2000		
Co-requisite(s):	DI3703			
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
methods and delivery:	Scheduled learning: 15 hours Guided independent study: 135 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr J Perry			
Lecturer(s)/Tutor(s):	Dr J Perry			

### DI3711 Reading in the Old Testament / Hebrew Bible

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	Lecture: 2.00 pm - 3.00 pm Mon, Seminar: 9.00 am - 11.00 am Fri (Classes held in Weeks 1 - 5 essay submitted Week 6)			

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.

Programme module type:	Compulsory for Biblical Studies, MTheol, BD, Hebrew, New Testament and Theological Studies			
Pre-requisite(s):	DI2001			
Co-requisite(s):	DI3712			
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
methods and delivery:	Scheduled learning: 15 hours Guided independent study: 135 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr M Nevader			
Lecturer(s)/Tutor(s):	Dr M Nevader			

### **DI3712 Reading in the New Testament**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	Lecture: 2.00 pm - 3.00 pm Mon, Seminar: 9.00 am - 11.00 am Fri (Classes held in Weeks 7 - 11 essay submitted Week 12)			

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 subdisciplines 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.

Programme module type:	Compulsory for Biblical Studies, MTheol, BD, Hebrew, New Testament and Theological Studies			
Pre-requisite(s):	DI2003			
Co-requisite(s):	DI3711			
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar (x 5 weeks).			
methods and delivery:	Scheduled learning: 15 hours Guided independent study: 135 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr D Moffitt			
Lecturer(s)/Tutor(s):	Dr D Moffitt			

### **DI3716 Reading in the Greek New Testament**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	Lecture: 11.00 am - 12.00 noon Thu, Seminar: 10.00 am - 12.00 noon Mon				

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.

Programme module type:	Optional for Biblical Studies, New Testament, Theological Studies, MTheol and BD					
Pre-requisite(s):	DI1005, DI2201 <b>Anti-requisite(s):</b> DI4632					
Learning and teaching	Weekly contact: 3-hour seminar.					
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 ho					
Assessment pattern:	As defined by QAA:					
	Written Examinations = 50%, Prac	ctical Exa	minations =	0%, Coursework = 50%		
	As used by St Andrews:					
	3-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	Dr S Hafemann					
Lecturer(s)/Tutor(s):	Dr S Hafemann					

### **DI4015 Communication in Divinity**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for Single Honours Biblical Studies, MTheol and Theological Studies				
Co-requisite(s):	ID4002				
Learning and teaching	Weekly contact: 3 hours of individual supervision per semester.				
methods and delivery:	Scheduled learning: 3 hours Guided independent study: 147 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr E Stoddart				
Lecturer(s)/Tutor(s):	Dr E Stoddart				

### **DI4498 Honours Dissertation in Divinity**

S	COTCAT Credits:	30	SCQF Level 10	Semester:	1 & 2 (taught twice)		
A	cademic year:	2016/7 & 2017/8					
P	lanned timetable:	To be arranged.					

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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Compulsory for Biblical Studies, Divinity BD, Hebrew, New Testament, Theological Studies and Master of Theology MTheol				
Anti-requisite(s):	DI4501, DI4497, DI4499				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 6 hours of individual supervision and 11 seminar hours over the semester				
	Scheduled learning: 17 hours Guided independent study: 283 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Dissertation = 100%				
Re-Assessment pattern:	Rewriting relevant portions or whole dissertation; mark capped at 7.				
Module Co-ordinator:	Dr D Moffitt				
Lecturer(s)/Tutor(s):	Dr D Moffitt				

# DI4511 Church History Special Topic: Thomas Aquinas SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

This module is an opportunity to study in depth Aquinas' profoundly influential work of systematic theology, the Summa Theologiae. There are two guiding topics for 2016-2017: 'The Life of Jesus: Aquinas' Christology' and 'Virtues and Vices: A Revolution in Christian Ethics'. These topics will be introduced in relation to the structure of the Summa as a whole, and to Aquinas' other writings in a variety of genres (such as Scripture commentary, sermons, poetry etc). Students may also consider the persistent effects of this classic work on subsequent theology and church practice (in Catholic, Orthodox and Reformed traditions) to the present day. All of Aquinas' works will be studied in English translation, and no prior knowledge of Aquinas' theology is necessary.

Programme module type:	Optional for MTheol, BD, Single Honours, MA Theological Studies and Joint Honours MA Theological Studies			
Learning and teaching	Weekly contact: 1-hour lecture and 1	L x 2-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr G Corbett			
Lecturer(s)/Tutor(s):	Dr G Corbett			

### DI4515 Victorian Hymn SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7

To be arranged.

Planned timetable:

This module examines the phenomenon of the Victorian hymn from the historical, theological, liturgical, literary, social and musical viewpoint. Using the hymn as a way into the theological and ecclesiastical world of the nineteenth century, it explores the background and motivation of hymn writers, the emergence and development of the congregational hymn as a major feature of church worship and the literary, spiritual and musical dimension.

Programme module type:	Optional for MA Theological Studies, MTheol, BD.				
Learning and teaching	us 1 x 2 hour seminar				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:					
Module Co-ordinator:	Dr I Bradley				
Lecturer(s)/Tutor(s):	Dr I Bradley				

Planned timetable:

### DI4526 Christian Mysticism Through the Ages SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7

To be arranged.

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.

Programme module type:	Optional for Theological Studies, BD and MTheol			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 lecture and 1 x 2-hour seminar, 2 additional hours over semester meeting with coordinator.			
	Scheduled learning: 35 hours Guided independent study: 265 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:  3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr W Hyland			
Lecturer(s)/Tutor(s):	Dr W Hyland			

DI4550 Baylor University Module	<b>.</b>					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2016/7					
Availability restrictions:	Available only to	Baylor University	students.			
Planned timetable:	To be arranged.					
This Module is specifically the Andrews students.	for visiting students and staff from Baylor University. It is not available for St					
Programme module type:	Baylor Universit	Baylor University programme.				
Pre-requisite(s):	Baylor University programme.					
Learning and teaching	Weekly contact: 1 lecture and 1 x 2-hour seminar.					
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117					
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews:  Coursework = 100% (To be confirmed)					
Re-Assessment pattern:	No Re-Assessment available. Students do not remain in the UK beyond the semester (i.e. we cannot re-assess them) and Baylor permits no re-assessment.					
	Baylor Programme Director					
Module Co-ordinator:	Daylor Programm	ne Director				

Baylor University Module							
SCOTCAT Credits:	15	15 SCQF Level 10 Semester: 2					
Academic year:	2016/7						
Availability restrictions:	Available only to	Baylor University	students.				
Planned timetable:	To be arranged.						
This Module is specifically f Andrews students.	or visiting studen	ts and staff from B	aylor University. I	t is not available for St			
Programme module type:	Baylor University programme.						
Pre-requisite(s):	Baylor University programme.						
Learning and teaching	Weekly contact: 1 lecture and 1 x 2-hour seminar.						
methods and delivery:	Scheduled learn	ing: 33 hours	Guided indepen	ndent study: 117 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%						
	As used by St A	ndrews:					
	Coursework = 10	00% (To be confirm	ed)				
Re-Assessment pattern:	No Re-Assessment available. Students do not remain in the UK beyond the semester (i.e. we cannot re-assess them) and Baylor permits no reassessment.						
Module Co-ordinator:	Baylor Programn	Baylor Programme Director					
Lecturer(s)/Tutor(s):	Baylor Programm	ne Director					

DI4551 I

DI4615 New Testament Special Topic: Book of Revelation and Apocalyptic Literature							
	SCOTCAT Credits:	30 SCQF Level 10 Semester: 1					
	Academic year:	2016/7					
	Planned timetable:	To be arranged.					

This module provides an introduction to the genre apocalypse and related genres that may be called apocalyptic in early Judaism and Christianity, with special reference to the book of Revelation. In the course of the module, students will become acquainted with Old Testament, Second Temple, New Testament, and post-New Testament period apocalyptic literature, from Daniel to the Shepherd of Hermas. The aim of the module is to investigate the nature, purposes, theological perspectives, and social functions of these texts, and to evaluate the various interpretative approaches for explicating them. We will also explore the significance of apocalyptic traditions for Judaism and Christianity in the ancient world and investigate the impact of apocalyptic thought on our world today (for instance, in religion, politics, and economics).

Programme module type:	Optional for Biblical Studies, New Testament and MTheol		
Learning and teaching	Weekly contact: 1 hour lecture and 2-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr E Shively		
Lecturer(s)/Tutor(s):	Dr E Shively		

### DI4628 Epistle to the Hebrews: English Text SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Availability restrictions:

Planned timetable: To be arranged.

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.

Programme module type:	Optional for Biblical Studies, New Testament, BD and MTheol		
Pre-requisite(s):	DI3711, DI3712		
Learning and teaching	Weekly contact: 1 lecture and 1 x 2-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr D Moffitt		
Lecturer(s)/Tutor(s):	Dr D Moffitt		

### DI4631 The Gospel of Mark: Greek Text SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7

**Planned timetable:** To be arranged.

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.

Programme module type:	Optional for Biblical Studies, New Testament, BD and MTheol		
Pre-requisite(s):	DI1006, DI3712		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr E Shively		
Lecturer(s)/Tutor(s):	Dr E Shively		

### DI4700 Hebrew Prose and Poetry SCOTCAT Credits: 30 SCQF Level 10 Semester: 1

Academic year: 2016/7

Planned timetable: 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

Programme module type:	Optional for Biblical Studies, Hebrew, BD and MTheol		
Pre-requisite(s):	DI1004 and 11 or better in DI2002		
Learning and teaching	Weekly contact: 3-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof J Davila		
Lecturer(s)/Tutor(s):	Prof J Davila	Prof J Davila	

### **DI4710 Exegesis of Biblical Hebrew Texts**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module aims to develop students' ability to read the Hebrew Bible in its original language. The class will meet for three hours each week to translate and interpret selected passages in Biblical Hebrew in a variety of literary genres, with detailed analysis of the grammar of each verse, and careful exegesis of its meaning with reference to the insights of the major critical commentaries and other relevant secondary literature.

Programme module type:	Optional for Biblical Studies, Hebrew, New Testament and MTheol		
Pre-requisite(s):	DI2002		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 3-hour seminar (x 11 weeks), 3 hours one-to-one supervision (x 1 week).		
	Scheduled learning: 36 hours Guided independent study: 264 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:  3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof J Davila		
Lecturer(s)/Tutor(s):	Dr A Harger		

### DI4711 Old Testament Special Topic : Creation and Chaos in the Old Testament and Ancient Near East

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module explores the dual themes of Creation and Chaos in the Old Testament/Hebrew Bible and related literature from the ancient Near East, and how as root cosmological ideas, each informs the theological, political and literary worlds of the Near East. Our primary focus will be the Hebrew Bible/Old Testament, but we will also look at the representation of Creation and Chaos in the literary giants from Mesopotamia (e.g. The Epic of Gilgamesh, the Enuma Elish), Egypt (e.g. The Hymn to Aten, The Memphite Theology), and the Levant (e.g. the Baal Cycle).

Programme module type:	Optional for Biblical Studies, Hebrew, New Testament and MTheol		
Pre-requisite(s):	DI2001		
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Nevader		
Lecturer(s)/Tutor(s):	Dr M Nevader		

#### **DI4726 Hebrew Readings**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Biblical Studies, Hebrew, BD and Mtheol		
Pre-requisite(s):	DI1004 and 11 or better in DI2002		
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	TBC		
Lecturer(s)/Tutor(s):	TBC		

#### DI4731 Ancient Jewish Literature from 1 Enoch to the Mishnah

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.	To be arranged.		

This module will focus on the study of ancient Jewish literature, such as the collection of texts known as 1 Enoch; the Dead Sea Scrolls and other scrolls recovered from the Judaean Desert; ancient noncanonical scriptures ("Old Testament pseudepigrapha"); the works of Philo of Alexandria; the works of Flavius Josephus; and early Rabbinic traditions. The module will examine selected issues, such as the approaches of the texts to the exegesis of the Hebrew Bible, the problems associated with the preservation and transmission of Jewish pseudepigrapha by Christians, and the relevance of ancient Jewish literature for our understanding of the New Testament.

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Programme module type:	Optional for Biblical Studies, Hebrew, New Testament, MTheol			
Pre-requisite(s):	DI2001			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, 1 x 1-hour lecture			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 2			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:  3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%(CONFIRM)			
Module Co-ordinator:	Prof J Davila			
Lecturer(s)/Tutor(s):	Prof J Davila			

#### DI4750 Themes and Texts in Christian-Buddhist Dialogue

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	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
	Academic year:	2016/7				
	Planned timetable:	11.00 am - 2.00 pm Wed.				

This module examines the foundations of Christianity and Buddhism and the possibility of dialogue between these two faiths/world religions. The possibilities of dialogue between a theistic and an atheistic religion are explored through themes such as silence, meditation and service as well as through theological texts by important authors, e.g. John, the 14th Dalai Lama, Raimon Pannikar, and Shantideva. This module has practical components such as periods of meditation, the recitation of sacred texts and the listening of music and mantras.

Programme module type:	Optional for BD MTheol, MA Theological Studies			
Learning and teaching	Weekly contact: 1 x 2-hour seminar and 1 x 1-hour lecture.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Prof M I Aguilar			
Lecturer(s)/Tutor(s):	Prof M I Aguilar			

#### Divinity - Honours Level - 2016/7 - December 2016

DI4794 J	14794 Joint Dissertation (30cr)						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC		
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.					
	Planned timetable:	To be arranged.					
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The dissertation must consist of approximately 10,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Joint Honours in the School of Divinity				
Pre-requisite(s):	A Letter of Agreement	Ar	nti-requisite(s):	More than 30 credits in other dissertation / project modules	
Learning and teaching	Weekly contact: As per Letter of Agreement.				
methods and delivery:	Scheduled learning: hours Guided independent s			dent study: hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = %, Practical Examinations = %, Coursework = %				
	As used by St Andrews:				
	As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				
Module Co-ordinator:	As per Letter of Agreement.	•			

#### **DI4800 Theology and Pastoral Care**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	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.

Programme module type:	Optional for Theological Studies and MTheol			
Pre-requisite(s):	11 or better in DI2000			
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr E Stoddart			
Lecturer(s)/Tutor(s):	Dr E Stoddart, Dr I Bradley			

#### DI4824 Theology in Latin America

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module explores the history and development of theology in Latin America from 1968 to 2004, he period from the Conference of Medellin (1968) to the publication of Petrella's The Future of Liberation Theology (2004). The module considers the work of Gutiérrez, Boff, Irarrazával, Támez, and Romero among others and their contribution to contemporary eco-theology, inculturation and political theology.

Programme module type:	Optional for Theological Studies and MTheol			
Learning and teaching	Weekly contact: 1 lecture and 1 x 2-hour seminar			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Prof M Aguilar			
Lecturer(s)/Tutor(s):	Prof M Aguilar			

#### Divinity - Honours Level - 2016/7 - December 2016

Planned timetable:

## DI4937 The Study of Theology SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7

To be arranged.

The module treats the nature and purposes of theology. Particular attention will be devoted to the history of theological study and to the ways in which the unity of the biblical, historical, doctrinal and practical inquiries may be conceived. The module begins by considering the object, cognitive principles, ends and settings of theology, and its place in the wider world of human intellectual inquiry. It then treats biblical studies, and historical, systematic and moral-practical theology in their historical development and considering their place in the theological curriculum. It closes with a treatment of the relation of intellectual and moral virtues in theological study. The module provides opportunity for students to extend their knowledge of the history of theological inquiry, to study some key classical and modern texts, to engage in critical reflection on the nature of the various sub-disciplines which make up the theological curriculum, and to consider whether theology is a unified intellectual enterprise. This module will be especially pertinent to final-year students seeking to integrate the varied elements so far studied.

Programme module type:	Optional for Theological Studies, MTheol, and BD			
Pre-requisite(s):	DI3701, DI3702			
Learning and teaching	Weekly contact: 1 x 2-hour seminar and 1 x 1-hour lecture			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 ho			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Module Co-ordinator:	ТВС			
Lecturer(s)/Tutor(s):	TBC			

#### **DI4940 Analytic Theology**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			

This module provides an overview of one of the most important recent developments in theology, namely, analytic theology. The latter borrows ideas, concepts, and ways of proceeding in theological discussion from analytic philosophy and capitalises on the field-changing developments that have taken place in Christian analytic philosophy over the last four decades. The specific topics it will consider will normally include a) God's relationship to time in the Christian interpretation of creation and incarnation; b) the nature of the human person engaging with dualist and materialist accounts; c) the significance of the doctrine of atonement for understanding the nature and conditions of forgiveness.

Programme module type:	Optional for BD, MTheol, MA Theological Studies		
Learning and teaching Weekly contact: 1 x 2-hour seminar and 1 x 1-hour lecture			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof A J Torrance		
Lecturer(s)/Tutor(s):	Prof A J Torrance and others		

#### **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**

EC3301 Econometrics					
	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	To be arranged.			

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

Programme module type:	Compulsory for Applied Economics, Economics, Financial Economics, BA (Int Hons) Economics and Economics as a major Optional for joint honours Economics.			
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Pre-requisite(s):	Permission of the Economics Honor	ırs Adviser.		
Anti-requisite(s):	EC3202	Required for:	EC4401	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 2-hour practical classes (x 4 weeks) 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).			
	Scheduled learning: 45 hours	Guided indepe	ndent study: 155 hours	
Assessment pattern:	As defined by QAA:			
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr P Macmillan			
Lecturer(s)/Tutor(s):	Dr P Macmillan			

#### **EC3302** Decision and Game Theory

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Pre-requisite(s):	Permission of the Economics Honours Adviser.		
Anti-requisite(s):	EC3201, EC4201		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework (incl. Class Test 15%) = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr M La Manna		
Lecturer(s)/Tutor(s):	Dr M La Manna		

#### **EC3303 Economic Growth**

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	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics			
Pre-requisite(s):	Permission of the Economics Honours Adviser.			
Anti-requisite(s):	EC3203, EC4201	EC3203, EC4201		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).			
	Scheduled learning: 37 hours Guided independent study: 163 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr R Stefanski			
Lecturer(s)/Tutor(s):	Dr R Stefanski			

#### **EC3304 Mathematical Economics**

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Pre-requisite(s):	Permission of the Economics Honours Adviser.		
Anti-requisite(s):	EC3201, EC3203, EC4201		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews:  2-hour Written Examination = 50%, Coursework (incl. 2 x Class Test 25% each ) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Zhang		
Lecturer(s)/Tutor(s):	Dr M Zhang		

#### **EC3305 Incentives and Contracts**

SCOTCAT Credits:	20	SCQF Level 9	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics			
Pre-requisite(s):	Permission of the Economics Honours	Adviser.		
Anti-requisite(s):	EC3201, EC4201			
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).			
	Scheduled learning: 37 hours Guided independent study: 163 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr G Gerasimou			
Lecturer(s)/Tutor(s):	Dr G Gerasimou			

## EC3306 Economic Fluctuations SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics			
Pre-requisite(s):	Permission of the Economics Honours	Adviser.		
Anti-requisite(s):	EC3203, EC4201			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).			
	Scheduled learning: 37 hours Guided independent study: 163 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr R Stefanski			
Lecturer(s)/Tutor(s):	Dr R Stefanski			

#### **EC4401 Advanced Econometrics**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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

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Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics			
Pre-requisite(s):	EC3301 or MT3508 Anti-requisite(s): EC4202, EC4		EC4202, EC4602	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, , 2-hour practical classes (x 3 weeks), 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).			
	Scheduled learning: 43 hours Guided independent study: 157 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews:  2-hour Written Examination = 50%, Coursework (incl. 2 x Class Test 25% each)			
	= 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Prof R McCrorie			
Lecturer(s)/Tutor(s):	Prof R McCrorie			

#### **EC4402 Economic History**

	SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
	Academic year:	2016/7 & 2017/8			
Planned timetable: To be arranged.					

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics			
Anti-requisite(s):	EC4602			
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).			
	Scheduled learning: 37 hours Guided independent study: 157 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 75%, Practical	Examinations = 0%, Coursework = 25%		
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Trew			
Lecturer(s)/Tutor(s):	Dr A Trew			

## EC4403 Health and Education SCOTCAT Credits: 20 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4603		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 15 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Leighton		
Lecturer(s)/Tutor(s):	Dr M Leighton		

EC4405 Economics of the Environment					
	SCOTCAT Credits: 20 SCQF Level 10 Semester: 1				1
	Academic year: 2016/7 & 2017/8				
	Planned timetable:	le: To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4505, EC4605		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:  2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr J Jin		
Lecturer(s)/Tutor(s):	Dr J Jin		

## EC4406 Experimental Economics SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2017/8

To be arranged.

Planned timetable:

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. The areas of experimental economics covered are the study of markets, the study of public choice issues, and individual choice behaviour. The module is designed so as to allow the student hands-on experience of participating in demo experiments in the tutorials/laboratories. Students' understanding of key economic concepts will be deepened through the lens of experimental economics. The module will develop students applied skills as students will learn how to summarize and interpret data from an economics experiment.

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4506, EC4606		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 100%, Practica	I Examinations = 0%, Coursework = 0%	
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. 2 x Class Tests 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Prof M Costa-Gomes		
Lecturer(s)/Tutor(s):	Prof M Costa-Gomes		

Planned timetable:

## EC4407 Behavioural Economics SCOTCAT Credits: 20 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8

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.

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4507, EC4607		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:  2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr G Gerasimou		
Lecturer(s)/Tutor(s):	Dr G Gerasimou		

EC4408	Industrial	Organisation	and	Regulation	ons	

SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year: 2016/7				
Planned timetable:	To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4508, EC4608		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-Hour Written Examination = 50%, Coursework (including Class test 25%) = 50%		
Re-Assessment pattern:	2-Hour Written Examination = 100%		
Module Co-ordinator:	Dr M La Manna		
Lecturer(s)/Tutor(s):	Dr M La Manna		

#### **EC4409 International Macroeconomics**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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

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Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4509, EC4609		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours	Guided independent study: 163 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr G Mitka		
Lecturer(s)/Tutor(s):	Dr G Mitka		

#### **EC4410 International Trade**

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SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4610		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr J Jin		
Lecturer(s)/Tutor(s):	Dr J Jin		

## EC4411 Economics of Labour SCOTCAT Credits: 20 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8

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.

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4511, EC4610		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 20%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr I Merkurieva		
Lecturer(s)/Tutor(s):	Dr I Merkurieva		

#### **EC4414 Macroeconomic Policy**

Planned timetable:

	SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
,	Academic year:	2016/7 & 2017/8			
	Planned timetable:	To be arranged.			

The module is designed to provide a specialised understanding of both monetary policy and fiscal policy issues. The lectures will cover a broad range of issues. These may include central bank independence, monetary policy transparency and accountability, monetary policy targets, Taylor rules and inflation targeting, monetary and fiscal policy in a depressed economy, monetary and fiscal policy interaction. We will also look at the operation of monetary policy in a number of institutions (e.g. ECB, Bank of England).

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4514, EC4614		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr P Macmillan		
Lecturer(s)/Tutor(s):	Dr P Macmillan		

#### **EC4415 Public Economics**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

This module will apply microeconomic reasoning to the study of the public sector. It will survey the scope and different modes of public intervention in the economy, with particular emphasis on the welfare state and income redistribution. It will discuss the optimal provision and financing of public and private goods, the design of tax systems, as well as other issues in public finance such as devolution, regulation and the auctioning of public assets.

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4615, EC4515		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr L Bridet		
Lecturer(s)/Tutor(s):	Dr L Bridet		

#### **EC4416 Innovation Economics**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2017/8			
Planned timetable:	To be arranged.			

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.

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Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics			
Anti-requisite(s):	EC4503, EC4616			
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).			
	Scheduled learning: 37 hours Guided independent study: 163 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr M La Manna			
Lecturer(s)/Tutor(s):	Dr M La Manna	Dr M La Manna		

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The main aim of this module is to provide a rigorous grounding in the theory and applications of finance and a thorough synthesis of the most important current research in finance, with a particular emphasis on the applications of the principles. The ultimate aim is to provide students with a standard approach to define, measure, as well as predict the value of financial claims in a world of uncertainty. The standard notion of risk versus return is defined and analytical economic models of how risks and returns are determined and traded in financial markets. Both normative and positive aspects of financial theory will be investigated, together with supporting descriptive and empirical evidence.

Programme module type:	Compulsory for Financial Economics		
	Optional for all Economics degrees and BA (Int Hons) Economics		
Anti-requisite(s):	EC4501, EC4617		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr L Barbopoulos		
Lecturer(s)/Tutor(s):	Dr L Barbopoulos		

#### **EC4418 Financial Economics: Corporate Finance**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

In this module we investigate the problem of how a collection of corporate liabilities is affected in value by corporate actions. Possible actions include corporate investment decisions, decisions regarding the firm's financial structure, changes in management rules and compensation and changes in the scope, specialisation and legal environment of the corporation's business. We emphasise standard methods for solving problems under economic uncertainty. At the end of this module the student will have a good working knowledge of institutions and the theory and valuation methods used worldwide in major corporations and financial institutions.

Programme module type:	Compulsory for Financial Economics		
	Optional for all Economics degrees and BA (Int Hons) Economics		
Anti-requisite(s):	EC4502, EC4602		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr V Prasad		
Lecturer(s)/Tutor(s):	Dr V Prasad		

### EC4419 Economics of Development SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2016/7

To be arranged.

Planned timetable:

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.

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4519		
Co-requisite(s):	None		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 hours of lectures over 11 weeks), 1-hour tutorials (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (including class test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Leighton		
Lecturer(s)/Tutor(s):	Dr M Leighton		

### EC4420 Inequality and Redistribution SCOTCAT Credits: 20 SCQF Level 10 Semester: 2

2016/7

Planned timetable: To be arranged.

Academic year:

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Anti-requisite(s):	EC4520, EC4620		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr T Cuhadaroglu		
Lecturer(s)/Tutor(s):	Dr T Cuhadaroglu	·	

#### **EC4421 Political Economy**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Int Hons) Economics		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 13 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Negri		
Lecturer(s)/Tutor(s):	Dr M Negri		

### EC4424 The Economics of Migration SCOTCAT Credits: 20 SCQF Level 10 Semester: 2 Academic year: 2016/7

To be arranged.

The number of international migrants has rapidly grown over the last few decades. This module explores the economic determinants and consequences of international migration, and sheds light on the often controversial policy debates surrounding immigration. Students will apply basic economic theory and empirical methods to understand the decision to migrate, the effect of immigration on labour markets and government budgets, the effect of diversity on economic performance, the effect of high¿skilled emigration on source countries and immigration policies. The course will have a strong focus on the empirical evidence on immigration and will train students¿ ability to critically assess this evidence.

Programme module type:	Optional for all Economics degrees, Financial Economics, BA (Intl Hons) Economics		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:  2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Braun		
Lecturer(s)/Tutor(s):	Dr S Braun		

#### EC4430 Portfolio Management

Planned timetable:

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

This module aims to develop students' knowledge and understanding of key issues in asset allocation and portfolio composition/management at an intermediate level. Several techniques available in the field of portfolio management are utilized, investigated, as well as assessed within the context of portfolio risk management and portfolio performance maximisation. Moreover this module aims to provide students with the opportunity to develop their ability to critically understand current theoretical and empirical research in the field of portfolio management and the implications of such research into alternative portfolio composition and portfolio management strategies.

Programme module type:	Compulsory for Financial Economics Optional for all other Economics degrees, BA (Int Hons) Economics		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures over 11 weeks, 1-hour tutorial (x 5 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework (incl. Class Test 25%) = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr L Chollete		
Lecturer(s)/Tutor(s):	Dr L Chollete		

# EC4499 Dissertation in Economics SCOTCAT Credits: 40 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of any Honours Economics Programmes. Planned timetable: 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 econometric analysis to a topic in economics. The dissertation is expected to present original research on a question determined by the student after consultation with their dissertation supervisor. A preliminary outline of it should have be approved within the first week of the Martinmas semester by the Director of Teaching and by the dissertation supervisor. The maximum number of words allowed is 15,000 but students will be advised to cover the topic in around 12,000.

Programme module type:	Optional for Single & Joint Honours Economics, Financial Economics			
Pre-requisite(s):	EC3301 and 40 credits from EC3302-EC3350, EC4401.	Anti-requisite(s):		EC4300, EC4302
Learning and teaching	Weekly contact: 5 lectures and 6 meetings with supervisor over the year.		over the year.	
methods and delivery:	Scheduled learning: 11 hours	ning: 11 hours Guided independent study: 389 hour		dent study: 389 hours
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews:			
	Dissertation = 80%, Coursework = 20%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr S Braun			
Lecturer(s)/Tutor(s):	Dr S Braun			

# SCOTCAT Credits: 20 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: UG - Available only to students in the second year of the Honours programme with the permission of the Director of Teaching who have achieved at least 17.5 in EC3303 or EC3306. Planned timetable: To be arranged.

The module will provide a thorough advanced treatment of the core models and concepts used in modern macroeconomics; for example the infinite horison Ramsey model and finite horison overlapping generations model and models that have been used to characterise short term fluctuations, such as the real business cycle approach and the New Keynesian approach. Among other things, the module will seek to explain the development of microbased macroeconomic theory, use models to predict the impact of policy changes on endogenous variables and critique modelling assumptions, especially in the context of policy analysis. Students are expected to have a strong undergraduate level training in macroeconomics, microeconomics and relevant mathematical and statistical techniques. Before commencement of the module, supplementary lectures will be given on the relevant mathematical methods.

Programme module type:	Optional for all Economics Degrees		
Pre-requisite(s):	EC3303 or EC3306 and Permission of the Director of Teaching.		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 10 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 42 hours Guided independent study: 158 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 88%, Practical Examinations = 0%, Coursework = 12%		
	As used by St Andrews:		
	3-hour Written Examination = 75%, Coursework (including class test 12.5%) = 25%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr O Senay		
Lecturer(s)/Tutor(s):	TBC		

# SCOTCAT Credits: 20 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: UG - Available only to students in the second year of the Honours programme with the permission of the Director of Teaching who have achieved at least 17.5 in EC3302 or EC3305. Planned timetable: To be arranged.

This module will provide a thorough advanced treatment of the core models and concepts used in modern microeconomics. Microeconomic theory is concerned with the behaviour of individual economic actors (e.g. firms, consumers) and the aggregation of their actions in different institutional frameworks (e.g. markets), and models economic activity as an interaction of individual economic agents pursuing their private interests. Students will be presented with a set of concepts and mathematical techniques which will enable them to achieve a better understanding of economic activity and outcomes. This involves an understanding of how microeconomic models are built, focusing on their objective in terms of the phenomenon they are meant to explain, and the consequences of their assumptions in terms of the applicability of their predictions. Students are expected to have a strong undergraduate level training in macroeconomics, microeconomics and relevant mathematical and statistical techniques. Before commencement of the module, supplementary lectures will be given on the relevant mathematical methods.

Programme module type:	Optional for all Economics degrees		
Pre-requisite(s):	EC3302 or EC3305 and Permission of the Director of Teaching		
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 10 weeks) plus 1 office hour (x 12 weeks).		
	Scheduled learning: 42 hours Guided independent study: 158 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 88%, Practical Examinations = 0%, Coursework = 12%		
	As used by St Andrews:  3-hour Written Examination = 75%, Coursework (including class test 12.5%) = 25%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr K Ozbek		
Lecturer(s)/Tutor(s):	Dr K Ozbek, Prof P Manzini		

# SCOTCAT Credits: Academic year: Output Discrete to the permission of the Director of Teaching who have achieved at least 17.5 in EC4401. Planned timetable: To be arranged.

This module will provide an advanced level training in aspects of econometric methods that is suitable for the basis for further work in econometrics and for understanding/being able to extract econometric techniques in published articles. The course will also give students the basis to support an empirical section in their MSc dissertation. Students are expected to have intermediate- level knowledge of matrix algebra, calculus and statistics. Before commencement of the module, supplementary lectures will be given on the relevant mathematical and statistical methods.

Programme module type:	Optional for all Economics degrees			
Pre-requisite(s):	EC4401 and Permission of the Director of Teaching.			
Learning and teaching methods and delivery:	Weekly contact: 20 hours of lectures over 11 weeks, 1-hour tutorial (x 8 weeks), 2-hour computing labs (x 2 weeks) plus 1 office hour (x 12 weeks)			
	Scheduled learning: 44 hours Guided independent study: 156 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 65%, Practical Examinations = 0%, Coursework = 35%			
	As used by St Andrews:  3-hour Written Examination = 50%, Coursework (including class test 15%) = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr I Merkurieva			
Lecturer(s)/Tutor(s):	Dr I Merkurieva, Dr K Petrova			

#### **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						
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
	Academic year:	2016/7				
	Planned timetable:	10.00 am and 11.00 am Fri				

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)

Programme module type:	Group A Optional for English and BA (Intl Hons) English				
Pre-requisite(s):	EN2003, EN2004	Anti-requisite(s): EN3010, ME3012		EN3010, ME3012	
Learning and teaching	Weekly contact: 1 lecture and 1 seminar, and 2 optional consultative hours.				
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr C Rauer				
Lecturer(s)/Tutor(s):	Dr C Rauer				

#### English - Honours Level - 2016/7 - August 2016

EN3112 Chaucer's Canterbury Ta	112 Chaucer's Canterbury Tales					
SCOTCAT Credits:	30	SCQF Level 9	Semester:	TBC		
Academic year:	2017/8					
Availability restrictions:	Availability to be	e firmly confirmed c	loser to the time.			
Planned timetable:	3.00 pm - 5.00 pm Mon					
	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)					
Programme module type:	Group A Optional for English and BA (Intl Hons) English					
Pre-requisite(s):	EN2003, EN2004					
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 hours per week (either 1 x 2-hour seminar or 1 lecture and 1 seminar), and 2 optional consultative hours.					
	Scheduled learn	ing: 44 hours	Guided indeper	ndent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	ТВС	твс				
Lecturer(s)/Tutor(s):	TBC					

	Lecturer(s)/Tutor(s):	TBC				
EN3113 (	Jnreformed Scotland: Ol	der Scots Liter	ature to 1560			
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
	Academic year:	2016/7				
	Planned timetable:	10.00 am Tue and 11.00 am Thu				
	representative selection of studied in the context of de before the cultural watersho	students to the late-mediaeval literature of pre-Reformation Scotland. A Older Scots works from the fifteenth and earlier sixteenth centuries will be evelopment in the language, literary culture and political climate of the period and of the Reformation. Writers studied will include Henryson, Dunbar, Douglass of their anonymous contemporaries. (Group A)				
	Programme module type:	Group A Optional for English				
	Pre-requisite(s):	EN2003, EN2004	1			
	Learning and teaching	Weekly contact	: 1 lecture, 1 semina	er and 2 optional co	onsultative hours.	
	methods and delivery:	Scheduled learn	ing: 44 hours	Guided indepen	dent study: 256 hours	
	Assessment pattern:	As defined by Q	AA:			
		Written Examina	ations = 30%, Praction	cal Examinations =	0%, Coursework = 70%	
		As used by St Aı	ndrews:			
		2-hour Written Examination = 30%, Coursework = 70%				
		3-hour Written Examination = 100%				
	Re-Assessment pattern:	3-hour Written I	3-hour Written Examination = 100%			
	Re-Assessment pattern:  Module Co-ordinator:	3-hour Written I Dr M R Purdie	Examination = 100%			

EN3141 7	141 Tragedy in the Age of Shakespeare					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
	Academic year:	2016/7				
	Planned timetable:	12.00 noon Tue	and 12.00 noon Thu	ı		
	The aim of the module is to develop an understanding of different versions of tragedy in the English Renaissance. (Group B)					
	Programme module type:	Group B Optional for English and BA (Intl Hons) English				
	Pre-requisite(s):	EN2003, EN2004				
	Learning and teaching	Weekly contact: 1 lecture and 1 tutorial, and 2 optional consultative hours.				
	methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hours				
	Assessment pattern:	As defined by Q		cal Evaminations –	0% Coursework - 50%	
			•	Lai Examinations =	0%, Coursework = 50%	
		As used by St Ar				
		2-hour Written Examination = 50%, Coursework = 50%				
	Re-Assessment pattern:	3-hour Written Examination = 100%				
	Module Co-ordinator:	TBC				
	Lecturer(s)/Tutor(s):	TBC				

EN3142 Renaissance Literature:	I3142 Renaissance Literature: Texts and Contexts					
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
Academic year:	2016/7	2016/7				
Planned timetable:	12.00 noon Tue and 12.00 noon Thu					
in formalist terms and in	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)					
Programme module type:	Group B Option	Group B Optional for English and BA (Intl Hons) English				
Pre-requisite(s):	EN2003, EN2004					
Learning and teaching	Weekly contact	: 1 lecture and 1 tut	orial, and 2 option	al consultative hours.		
methods and delivery:	Scheduled learn	Scheduled learning: 44 hours Guided independent study: 256 hours				
Assessment pattern:	As defined by C	AA:				
	Written Examin	ations = 50%, Praction	cal Examinations =	0%, Coursework = 50%		
	As used by St A	As used by St Andrews:				
	2-hour Written	2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	Prof N P P Rhod	Prof N P P Rhodes				
Lecturer(s)/Tutor(s):	Prof N P P Rhod	es				

#### English - Honours Level - 2016/7 - August 2016

3162 Revolution and Romantic	62 Revolution and Romanticism: Literature, History and Society (1789-1805)						
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1			
Academic year:	2016/7						
Planned timetable:	11.00 am Tue ar	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)						
Programme module type:	Group C Optional for English and BA (Intl Hons) English						
Pre-requisite(s):	EN2003, EN2004						
Learning and teaching methods and delivery:	Weekly contact: 2 hours per week: seminars, lectures, or tutorials, and 2 optional consultative hours.						
	Scheduled learn	ing: 44 hours	Guided indepen	dent study: 256 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%						
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%						
Re-Assessment pattern:	3-hour Written Examination = 100%						
Module Co-ordinator:	Prof N H Roe						
Lecturer(s)/Tutor(s):	Prof N H Roe						

EN3163 The Younger Romantics:	3163 The Younger Romantics: Poetry and Prose (1810 - 1830)					
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2		
Academic year:	2016/7					
Planned timetable:	11.00 am Thu ar	nd 11.00 am Fri				
	This module aims to acquaint students with some principal poetic and prose texts of the second generation of English Romantic writers. (Group C)					
Programme module type:	Group C Optiona	Group C Optional for English and BA (Intl Hons) English				
Pre-requisite(s):	EN2003, EN2004					
Required for:	EN4366					
Learning and teaching methods and delivery:	Weekly contact: 2 hours: seminars, lectures or tutorials, and 2 optional consultative hours.					
	Scheduled learn	ing: 44 hours	Guided indeper	ndent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	Prof N H Roe					
Lecturer(s)/Tutor(s):	Prof N H Roe					

## EN3165 'Loose Baggy Monsters': The Rise and Fall of the Victorian Novel SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 9.00 am - 11.00 am Wed

In spite of what Henry James's famously disparaging characterisation of Victorian novels as 'loose baggy monsters' might suggest, the novel was, without a doubt, the dominant cultural form of the Victorian period. From the prudent and proper to the rude and risqué, and from the 1830s to the fin de siècle, the Victorian novel was, in its own time, a capacious, malleable and contested form of cultural production, and one which continues to resist easy categorisation today. On this module we will explore the rich heterogeneity of the Victorian novel through close examination of works by a range of canonical and non-canonical authors. We will examine the changing shape of the novel throughout the nineteenth century (from the sprawling 'monstrosity' of the triple-decker to the compact neatness of the proto-modernist aesthetic of the 1890s), as well as the range of novelistic genres that proliferated at this time (including realism, sensation, the industrial novel, Victorian gothic, horror, adventure, and science fiction), and consider the ways in which the cultural, social and political values of Victorian Britain are both encoded and contested in the novels of the age.

Programme module type:	Group C Optional for English and BA (Intl Hons) English		
Pre-requisite(s):	EN2003, EN2004		
Learning and teaching	Weekly contact: 2-hour seminar, and 2 optional consultative hours weekly.		
methods and delivery:	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, C	Coursework = 50%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C Gill		
Lecturer(s)/Tutor(s):	Dr C Gill		

#### **EN3166 Victorian Poetry's Voices**

1000000					
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	9.00 am -11.00 am Tue				

Throughout the Victorian period poetry was viewed simultaneously as the highest mode of artistic expression and as a marginal practice, consigned to the periphery of culture by the novel, the newspaper, and other popular forms of writing. This ambiguity sparked a series of debates about the place of poetry in modern culture, as Victorian poets tried to define and defend the value and purpose of their work. This module will explore these debates by focusing on the concept of 'voice' in a range of canonical and non-canonical poems. The module will consider how Victorian poets experimented with the forms and conventions of verse in order to speak in different voices, writing innovative poems that undermined the barrier between literary language and the patterns of everyday speech, and that interrogated the links between language and personal identity. It will also examine the ways in which poets used the diverse voices of their writing to address the social and political issues that shaped Victorian culture.

Programme module type:	Group C Optional for English and BA (Intl Hons) English)				
Pre-requisite(s):	EN2003, EN2004	Anti-requisite(s): EN4364			
Learning and teaching	Weekly contact: 2-hour seminar, and 2 optional consultative hours.				
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hou				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr G Tate				
Lecturer(s)/Tutor(s):	Dr G Tate				

#### **EN3201 Literary Theory**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	11.00 am - 1.00 pm Fri				

This module is designed to guide students through some fundamental questions in literary theory, and introduce them to the writing of some canonical critical theorists. Week by week, in a series of two-hour sessions, students will be introduced to a question or problem in literary interpretation, such as the role of the unconscious in writing, the ideas of ethnicity and nation and their influence on literature and culture. By reading a selection of theoretical texts each week, students will develop an understanding of these fundamental questions. Students will be introduced to the terminology of the various different theoretical positions studied; gaining familiarity with feminist, psychoanalytical, Marxist, post-colonial and post-structuralist concepts and terms, amongst others. Students should be able to understand these terms and employ them in their own work in a clear and unpretentious manner. Over the course of this module students will also have to consider the methodology of other disciplines in the arts, humanities and social sciences (philosophy, anthropology, political theory and history, for example), and ask how the methodology of literary studies is related to those other disciplines. (Group E)

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 1 lecture and 1 tutorial, and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hour			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Raychaudhuri			
Lecturer(s)/Tutor(s):	Dr A Raychaudhuri			

EN3207 1	07 Twentieth-Century British and Irish Drama						
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
	Academic year:	2016/7	2016/7				
	Planned timetable:	12.00 noon Mor	12.00 noon Mon and 12.00 noon Wed				
	This module aims to introdustudy of drama of any period	duce students to English drama of the twentieth century and to issues in the od. (Group E)					
	Programme module type:	Group E Optiona	Group E Optional for English				
	Pre-requisite(s):	EN2003, EN2004					
	Learning and teaching	Weekly contact: 1 lecture and 1 seminar, and 2 optional consultative hours.					
	methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hour					
	Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
		As used by St Andrews:					
		2-hour Written Examination = 50%, Coursework = 50%					
	Re-Assessment pattern:	3-hour Written Examination = 100%					
	Module Co-ordinator:	Dr S Haddow					
	Lecturer(s)/Tutor(s):	Dr S Haddow					

Scottish Verse							
SCOTCAT Credits:	30	SCQF Level 9	Semester:	ТВС			
Academic year:	2017/8						
Availability restrictions:	Availability t	o be confirmed close	r to the time.				
Planned timetable:	10.00 am We	ed and 10.00 am Fri					
		vey of Scottish poetry that includes some detailed engagement with major and MacDiarmid, as well as the opportunity to work with living writers.					
Programme module type:	Group E Opt	Group E Optional for English					
Pre-requisite(s):	EN2003, EN2	EN2003, EN2004					
Learning and teaching methods and delivery:	Weekly contact: 1 lecture/seminar and 1 seminar, and 2 optional consultative hours.						
	Scheduled le	earning: 44 hours	Guided inde	pendent study: 256 hours			
Assessment pattern:	As defined b	y QAA:					
	Written Exar	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews:						
	2-hour Written Examination = 50%, Coursework = 50%						
Re-Assessment pattern:	3-hour Writt	3-hour Written Examination = 100%					
Module Co-ordinator:	Prof R Crawf	ord					
Lecturer(s)/Tutor(s):	Prof R Crawf	ord					

#### EN3212 Modernist Literature: Making It New?

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	2.00 pm - 4.00 p	om Fri			

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)

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture and 1 x 1-hour seminar, and 2 optional consultative hours.			
	Scheduled learning: 44 hours Guided independent study: 256 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr B Carver			
Lecturer(s)/Tutor(s):	Dr B Carver			

#### **EN3213 Postcolonial Literature and Theory**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2017/8			
Availability restrictions:	Availability to be confirmed closer to the time.			
Planned timetable:	12.00 noon Mor	n and 12.00 noon Fr	i	

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)

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 2 x 1-hour seminars, and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hour			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr L M Burns			
Lecturer(s)/Tutor(s):	Dr L M Burns			

# EN3214 The Country and the City in Scottish Literature SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: 10.00 am - 11.00 am Mon and 10.00 am - 11.00 am Wed

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)

	<u> </u>			
Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 2 x 1-hour seminar, and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hou			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr P Mackay			
Lecturer(s)/Tutor(s):	Dr P Mackay			

EN3215 Atomic Cultures: Anglophone Writing and the Global Cold War							
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
	Academic year:	2016/7					
	Planned timetable:	11.00 am Tue ar	1.00 am Tue and 11.00 am Thu				

On August 6, 1945, the bombing of Hiroshima announced the beginning of a new, "nuclear" age. As the Second World War came to an end, the victors geared up for a new and no less global conflict, a Cold War between the U.S.S.R and the western powers which would involve countless other nations, taking place by means of espionage, proxy wars, and cultural influence. This module introduces the literature and related culture of the Cold War Anglosphere, from reportage and protest lyrics to fictions of apocalypse, espionage, and paranoia, and explores how the radioactive energy of the atomic age reshaped the twentieth-century imagination. (Group E)

Programme module type:	Group E Optional for English				
Pre-requisite(s):	EN2003, EN2004				
Learning and teaching	Weekly contact: 1 lecture, 1 seminar plus 2 optional consultation hours.				
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	2-hour Writtne Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr J Purdon				

#### **EN4311 Old English Poetry**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2017/8			
Planned timetable:	2.00 pm - 4.00 pm Mon			

A wide-ranging study of Old English poetry, including heroic and elegiac works, wisdom-poetry, riddles, and religious verse. The texts chosen for study reflect the variety and quality of Old English poetry, and reveal ways in which traditional Germanic forms and themes were adapted within the literate Christian culture of Anglo-Saxon England. (Group A)

Programme module type:	Group A Optional for English and BA (Intl Hons) English			
Pre-requisite(s):	EN2003, EN2004	Anti-requisite(s): EN4212		
Learning and teaching	Weekly contact: 2 tutorials, and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours	Guided independ		dent study: 256 hours
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews:  2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr C Rauer			
Lecturer(s)/Tutor(s):	Dr C Rauer			

#### EN4312 Authorising English: Society, Gender and Religion in Late Mediaeval English Literature

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	3.00 pm and 4.00 pm Mon			

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)

Programme module type:	Group A Optional for English		
Pre-requisite(s):	EN2003, EN2004		
Learning and teaching			
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr I R Johnson		
Lecturer(s)/Tutor(s):	Dr I R Johnson		

### EN4314 Old English Afterlives: Literary Anglo-Saxonism SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7

3.00 - 5.00 pm Tue

Old English texts are studied rigorously in the original language. (Group A)

Planned timetable:

On this module students will study the relationship between Old English literary culture and the modern imagination. Poems, novels and films from the nineteenth to the twenty-first centuries will be studied alongside Old English 'sources' such as Beowulf and Bede, and students will produce their own examples of Anglo-Saxonist creative work as well as investigating that of writers from Wordsworth to Heaney. The module focuses on literary technique, as well as on the history and ideology of Anglo-Saxonism. It is recommended that students have previously taken an Old English beginner's course (such as EN2003), as

Programme module type:	Group A Optional for English and BA (Intl Hons) English		
Pre-requisite(s):	EN2003, EN2004		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, and 2 optional consultative hours.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:  Coursework = 100% (1 x 2,000-2,500-word Critical Essay = 25%, 1 x Class  Translation Test = 25%, Portfolio = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C S Jones		
Lecturer(s)/Tutor(s):	Dr C S Jones		

## EN4315 Apocalyptic Literature in Early English SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 9.00 am and 10.00 am Thu

Christianity has always incorporated within its beliefs and institutions an inbuilt expectation of the End of Time, as brought about by the Second Coming of Christ and the Day of Judgment. On this module students will examine the expression of that apocalyptic expectation in a number of literary genres in English, including Biblical texts, chronicles, homilies, and poems from the early medieval period. These texts sometimes include colourful depictions of hell, the Antichrist, and dragons in the sky, but can also be intensely political, as well as theologically involved. Students will translate and study these works in Old English (or Anglo-Saxon) and Early Middle English. Previous experience with this language is necessary. (Group A)

Programme module type:	Group A Optional for English		
Pre-requisite(s):	EN2003, EN2004		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, and 2 optional consultative hours		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C S Jones		
Lecturer(s)/Tutor(s):	Dr C S Jones		

#### **EN4316 Courtly Literature in Middle English**

<u> </u>				
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	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)

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Programme module type:	Group A Optional for English		
Pre-requisite(s):	EN2003, EN2004 (for St Andrews students - may be waived for JSA students).		
Learning and teaching	Weekly contact: 1 lecture and 1 seminar, and 2 optional consultative hours.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M R Purdie		
Lecturer(s)/Tutor(s):	Dr M R Purdie		

#### **EN4342 Restoration Drama in Context**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC
Academic year:	2017/8			
Availability restrictions:	Availability to be confirmed closer to the time.			
Planned timetable:	11.00 am - 1.00 pm Mon			

This module focuses on dramatic literature from the period c. 1660-1710 while aiming to study dramatic art in relation to its literary and historical contexts. We will read approximately half a dozen plays in different genres alongside the poetry of John Dryden, the Earl of Rochester, Aphra Behn, and others, and in conversation with Restoration historiography. We will also touch on the material conditions of Restoration theatre: playhouses and stages, players and performances, patronage and economics. (Group B)

Programme module type:	Group B Optional for English		
Pre-requisite(s):	EN2003, EN2004		
Learning and teaching	Weekly contact: 1 lecture and 1 tutorial, and 2 optional consultative hours.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M C Augustine		
Lecturer(s)/Tutor(s):	Dr M C Augustine		

EN4344 Early English R	344 Early English Romance Comedy: Shakespeare and his Contemporaries						
SCOTCAT Credit	ts:	30	SCQF Level 10	Semester:	1		
Academic year:		2016/7					
Planned timeta	ble:	2.00 pm Mon and 11.00 am Wed					
traditions of c	omedy and	ry and drama from the sixteenth and seventeenth centuries that engages with romance. Texts to be studied include: selected early and late plays by 'Old Arcadia'; and Book III of Edmund Spenser's 'Faerie Queene. (Group B)					
Programme mo	dule type:	Group B Optional for English					
Pre-requisite(s)	:	EN2003, EN2004					
Learning and t		Weekly contact: 1 lecture and 1 seminar/tutorial and 2 optional consultative hours.					
		Scheduled learning: 44 hours Guided independent study: 256 hours					
Assessment pa	attern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
		As used by St Andrews:					
		2-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment	pattern:	3-hour Written Examination = 100%					
Module Co-ord	inator:	Dr A L Davis					
Lecturer(s)/Tut	or(s):	Dr A L Davis					

EN4345 Hard Cases: Literary Complexity from Donne to Pope							
	SCOTCAT Credits: 30 SCQF Level 10 Semester: 2						
	Academic year: 2016/7						
	Planned timetable: 2.00 pm - 4.00 pm Mon						
	Planned timetable: 2.00 pm - 4.00 pm Mon						

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)

Programme module type:	Group B Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 1 x 2-hour seminar,	and 2 optional consultative hours.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	As used by St Andrews:  2-hour Written Examination = 40%, Coursework = 60%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
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	
Academic year:	2016/7				
Planned timetable:	10.00 am Tue and Thu				

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)

Programme module type:	Group B Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching				
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A L Davis			
Lecturer(s)/Tutor(s):	Dr A L Davis			

#### **EN4347 Milton**

SCOTCAT Credits:	30 SCQF Level 10		Semester:	1		
Academic year:	2016/7					
Planned timetable:	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)

Programme module type:	Group B Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching				
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr M Augustine			
Lecturer(s)/Tutor(s):	Dr M Augustine			

### EN4348 Bodies and Selves in the Renaissance SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 12.00 noon - 2.00 pm Thu

The aim of this module is to place the relationship between the body, the self and the book at the heart of our understanding of Renaissance literature. From the body as a site for systems of ritual punishment, to dissection as a model for selfhood, different forms of corporeality will be explored as literary tropes. Primary texts will be examined alongside a diverse range of historical material, including anatomy textbooks and philosophical works, in order to contextualise theories of embodiment and selfhood. Looking at a range of texts by writers including Shakespeare, Donne, Montaigne, Webster, Marlowe, Amelia Lanyer, Jonson and Spenser, Bodies and Selves will examine how bodily systems shape textual forms. 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)

Programme module type:	Group B - Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching methods and delivery:	Weekly contact: 2-hour seminar (x 11 week) and 2 optional consultative hours.			
	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Shinn			
Lecturer(s)/Tutor(s):	Dr A Shinn			

EN4361 The Novels of Jane Austen in Context							
	SCOTCAT Credits: 30 SCQF Level 10 Semester: 1						
	Academic year:	c year: 2016/7					
	Planned timetable:	d timetable: 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)

Programme module type:	Group C Optional for English and BA (Intl Hons) English				
Pre-requisite(s):	EN2003, EN2004				
Learning and teaching	Weekly contact: 1 x 2-hour seminar, and 2 optional consultative hours.				
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hou				
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr K Garner				
Lecturer(s)/Tutor(s):	Dr K Garner				

FN/1262 Domontic Writing and Wa

Assessment pattern:

Re-Assessment pattern:

Module Co-ordinator:

Lecturer(s)/Tutor(s):

### EN4362 Mind, Body and Soul: Literature in the Enlightenment SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 2.00 pm Tue and 2.00 pm Thu

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)

Programme module type:	Group C Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching				
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr T Jones			
Lecturer(s)/Tutor(s):	Dr T Jones			

EN4363 Romantic Writin	363 Romantic Writing and Women						
SCOTCAT Credits:		30	SCQF Level 10	Semester:	2		
Academic year:		2016/7					
Planned timetable	e:	2.00 pm Tue and 1.00 pm Fri					
female contempo fictional prose en	raries? Thi nanating f revolution	vorth and Shelley is well known to students of Romanticism - but what of their his module explores the richly varied and often exciting fiction, poetry and nonfrom the pen of women writers in the aftermath of the French Revolution, in in female manners' sprang out of the momentous changes of post-1789					
Programme modu	ıle type:	Group C Optional for English					
Pre-requisite(s):		EN2003, EN2004					
Learning and tea methods and de	_	Weekly contact: 1 lecture/seminar and 1 tutorial/seminar and 2 optional consultative hours.					
		Scheduled learn	ing: 44 hours	Guided indeper	ndent study: 256 hours		

Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%

2-hour Written Examination = 50%, Coursework = 50%

As defined by QAA:

Dr S Manly

Dr S Manly

As used by St Andrews:

3-hour Written Examination = 100%

### EN4365 Literature and Childhood in the Eighteenth Century SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 9.00 am - 11.00 am Wed

This module introduces students to some of the key themes and concerns of literature written for and about children in the eighteenth and early nineteenth centuries via the study of selected key works by a range of philosophical and political thinkers, educationalists, fiction writers and poets. Engaging in close reading of key texts, and drawing on contemporary discussions of and recent critical work on children's literature, students will consider the literary, social and political contexts and consequences associated with the imagining and interpretation of childhood and children's reading. (Group C)

Programme module type:	Group C Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 1 x 2-hour seminar,	and 2 optional consultative hours		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, C	Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr S C Manly			
Lecturer(s)/Tutor(s):	Dr S C Manly			

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1		
Academic year:	2016/7					
Availability restrictions:	Availability to be	confirmed closer t	o the time.			
Planned timetable:	10.00 am - 12.00	) noon Mon				
what made him one of the	pportunity to study the poetry and drama of Lord Byron in depth, and to explore most complex, demanding, and controversial writers of the Romantic period. 's major works in their complete form to enable a uniquely detailed level of ment.(Group C)					
Programme module type:	Group C Optional for English					
Pre-requisite(s):	EN2003, EN2004					
Learning and teaching	Weekly contact	: 1 x 2-hour seminar	, and 2 optional co	nsultative hours.		
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hours					
Assessment pattern:	As defined by QAA:					
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews:					
	2-hour Written Examination = 50%, Coursework = 50%					

3-hour Written Examination = 100%

Dr B Hewitt

Dr B Hewitt

**EN4366 Byron's Long Poems and Dramas** 

Re-Assessment pattern:

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

### English - Honours Level - 2016/7 - August 2016

### **EN4367 Romantic Gothic**

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	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2			
	Academic year:	2016/7						
	Planned timetable:	10.00 am Mon a						

This module examines the dark side of British Romanticism. Ghosts, reanimated bodies, monsters, fragmented manuscripts and haunted spaces fill the works of Romantic poets and novelists alike. The Romantics' fascination with the Gothic will be placed in the context of anxieties about the French Revolution, religion, sexuality, race and nation, as well developments in late eighteenth-century print and book production: the module includes a scheduled visit to Martyrs Kirk Library to view a selection of Gothic rare books. Students will also study eighteenth-century theoretical debates about terror and horror and engage with critical issues that have long occupied modern critics of the genre, such as the contested categories of Male and Female Gothic. (Group C)

Programme module type:	Group C Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 1 x 2-hour seminar,	and 2 optional consultative hours.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr K Garner			
Lecturer(s)/Tutor(s):	Dr K Garner			

#### **EN4368** Read all about it! Victorian Literature and the Press

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2		
Academic year:	2016/7	2016/7				
Planned timetable:	11.00 am Fri and 12.00 noon Fri.					

The nineteenth century ushered in the era of 'the newspapers for the million' when newspapers and periodicals were brought within the reach of unprecedented numbers of readers. This module will explore the impact of the nineteenth-century information and communications revolution on the literature of the period, from novels serialised in periodicals to the Sherlock Holmes stories published in The Strand. As the future of newspapers and the material book continues to be debated in our own digital age, this module will take a timely look at their interrelated history. (Group C)

Programme module type:	Group C 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 weekly.			
	Scheduled learning: 44 hours Guided independent study: 256 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr C Gill			
Lecturer(s)/Tutor(s):	Dr C Gill			

### EN4369 Victorian Literature and Science SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 3.00 pm - 5.00 pm Mon

How is scientific knowledge transformed when it is deployed in literary writing? How do linguistic strategies such as metaphor shape the communication and reception of scientific theories and concepts? Can students of English analyse a passage of scientific writing in the same way as they would a literary text? This module sets out to answer these questions by exploring the diverse connections between literature and science in the Victorian period. The decades between 1830 and 1900 witnessed the development of the scientific disciplines in their modern forms, and the module will examine the role of literature in disseminating, questioning, and legitimising the intellectual authority of science in Victorian Britain. The module will trace the interactions between literature and science in Victorian poetry, the realist novel, and science fiction, and in the writing of scientists such as the physicist John Tyndall, the biologist Thomas Henry Huxley, and Charles Darwin. (Group C)

Programme module type:	Group C Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 2-hour seminars and	d 2 optional consultative hours.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr G Tate			
Lecturer(s)/Tutor(s):	Dr G Tate			

EN4398 Special Topic in English								
SCOTCAT Cre	edits:	15 SCQF Level 10 Semester: 1						
Academic ye	ar:	2016/7						
Availability r	estrictions:	Available only to students also doing ID4002. Places on ID4002 will be limited and entry will be competitive. Only those applicants who are successful in being admitted to the placement module will be participants in this module.  9.00 am Fri						
Planned time	etable:							

This module complements ID4002 'Communication and Teaching in Arts and Humanities' in which students gain substantial experience of a working environment. This module provides the opportunity for students to cary out an extended piece of work (in the form of a short dissertation) on a topic related to their work in ID4002. For example, the topic could have a pedagogical focus, exploring the place of English in education, or it could be a more detailed exploration of a subject related to the student's work in ID4002.

Programme module type:	Optional for English				
Pre-requisite(s):	EN2003, EN2004				
Co-requisite(s):	ID4002				
Learning and teaching	Weekly contact: 3 hours of individua	I supervision over the semester.			
methods and delivery:	Scheduled learning: 3 hours	Guided independent study: 147 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr C Rauer				
Lecturer(s)/Tutor(s):	Dr C Rauer				

#### English - Honours Level - 2016/7 - August 2016

EN4399 Dissertation in English							
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	9.00 am Fri			_		

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Compulsory for Single Honours English and BA (Intl Hons) English. Optional for Joint Honours English			
Pre-requisite(s):	A pass in any 3000-level English module.			
Learning and teaching	Weekly contact: 6 hours per semes	ter + 1 consultation hour weekly.		
methods and delivery:	Scheduled learning: 17 hours	Guided independent study: 283 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Dissertation = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr P Mackay			
Lecturer(s)/Tutor(s):	Team taught			

Shakespeare and Film					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2	
Academic year:	2016/7				
Planned timetable:	3.00 pm - 4.00 pm Thu, 2.00 pm Fri, plus film viewing (from 3.00 - 5.00 pm Fri).				
including an introductory ex	of Shakespeare's plays (including adaptations) from the silent era to the present, exploration of film history, theory and practice. There will be a film viewing each the opportunity to map out a design for filming a scene from one of the plays (Group E)				
Programme module type:	Group E Optional for English				
Pre-requisite(s):	EN2003, EN2004				
Learning and teaching methods and delivery:	Weekly contact: hours of film vie		and 2 optional con	sultative hours, and 2	
	Scheduled learn	ing: 66 hours	Guided indeper	ndent study: 234 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%				
	As used by St Andrews:				
	2-hour Written Examination = 40%, Coursework = 60%				
Re-Assessment pattern:	3-hour Written I	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Shinn				

Dr A Shinn

Lecturer(s)/Tutor(s):

#### **EN4405 Contemporary Poetry in Great Britain and Ireland SCOTCAT Credits:** SCQF Level 10 30 Semester: 2 2016/7 Academic year: Planned timetable: 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) Group E Optional for English Programme module type: Pre-requisite(s): EN2003, EN2004 Learning and teaching Weekly contact: 2 x 1-hour seminars, and 2 optional consultative hours. methods and delivery: Scheduled learning: 44 hours Guided independent study: 256 hours Assessment pattern: As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50% As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50% **Re-Assessment pattern:** 3-hour Written Examination = 100% **Module Co-ordinator:** Prof D Paterson Lecturer(s)/Tutor(s): Prof D Paterson

EN4406 (	06 Contemporary British Fiction							
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2			
	Academic year:	2016/7						
	Planned timetable:	11.00 am - 12.00 noon Mon and Thu						
	including examples of the sl there is no body of settled	to explore the range and diversity of British fiction of the last two decades, e short story, and to meet the challenge of entering into debate in areas where cled opinion. Texts selected will vary from year to year. Students will typically ine works, looking at both thematic and formal issues. (Group E)						
	Programme module type:	Group E Optional for English						
	Pre-requisite(s):	EN2003, EN2004						
	Learning and teaching	Weekly contact	: 1 x lecture and 1 se	eminar, and 2 option	onal consultative hours.			
	methods and delivery:	Scheduled learn	ing: 44 hours	Guided indepen	ndent study: 256 hours			
	Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%  3-hour Written Examination = 100%						
	Re-Assessment pattern:							
	Module Co-ordinator:	Dr J Purdon						
	Lecturer(s)/Tutor(s):	Dr J Purdon						

### English - Honours Level - 2016/7 - August 2016

EN4415 T	N4415 T.S. Eliot								
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2				
	Academic year:	2016/7	2016/7						
	Planned timetable:	11.00 am - 1.00	11.00 am - 1.00 pm Wed						
	and criticism. Building on th	ule aims to familiarise students with the Complete Poems of T.S. Eliot, and with some of his drama cism. Building on the study of poetry at sub-honours level, this module is freestanding, though it tes to the study of poetry and Modernist writing at Honours level. (Group E)							
	Programme module type:	Group E Optional for English, section II for BA (Intl Hons) English							
	Pre-requisite(s):	EN2003, EN2004							
	Learning and teaching	Weekly contact	: 1 x 2-hour semina,	r and 2 optional co	nsultative hours.				
	methods and delivery:	Scheduled learn	ing: 44 hours	Guided indeper	ndent study: 256 hours				
	Assessment pattern:	As defined by Q Written Examina		cal Examinations =	0%, Coursework = 50%				
		As used by St A	ndrews:						
		2-hour Written Examination = 50%, Coursework = 50%							
	Re-Assessment pattern:	3-hour Written Examination = 100%							
	Module Co-ordinator:	Prof R Crawford							
	Lecturer(s)/Tutor(s):	Prof R Crawford							

ENIAALE Virginia Woolf							
EN4416 Virginia Woolf  SCOTCAT Credits:	30	SCOF Level 10	Semester:	1			
	2016/7	3CQF Level 10	Semester:	1			
Academic year:	2010/7						
Planned timetable:	3.00 pm - 5.00 p	3.00 pm - 5.00 pm Thu					
century. This module involv her contribution to literary	polf have had a major impact on the development of the English novel this less detailed study of Woolf's most important fictional texts, and also considers criticism and feminism through readings of selected extracts from her essays int of critical and communication skills through written and oral assignments a module. (Group E)						
Programme module type:	Group E Optional for English, section II for BA (Intl Hons) English						
Pre-requisite(s):	EN2003, EN2004						
Learning and teaching methods and delivery:	Weekly contact: hours.	: 1 lecture and 1 ser	ninar/tutorial, and	2 optional consultative			
	Scheduled learn	ing: 44 hours	Guided indeper	ndent study: 256 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%						
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%						
Re-Assessment pattern:	3-hour Written Examination = 100%						
Module Co-ordinator:	Dr E Sutton	Dr E Sutton					
Lecturer(s)/Tutor(s):	Dr E Sutton	Dr E Sutton					

EN4417 (	N4417 Creative Writing 1							
	SCOTCAT Credits:	30	SCQF Level 10	s	Semester:	1		
	Academic year:	2016/7	2016/7					
	Planned timetable:	11.00 am Wed a	nd 12.00 noon We	ed.				
		creative writing through both reading and composition. Students will learn to f literary forms critically, and assessment will include submissions of original						
	Programme module type:	Group E Optional for English						
	Pre-requisite(s):	EN2003, EN2004 Anti-requisite(s): EN4420, EN4500						
	Learning and teaching	Weekly contact:	1 seminar and 1 t	uto	orial, and 2 option	al consultative hours.		
	methods and delivery:	Scheduled learn	ing: 44 hours		Guided indepen	dent study: 256 hours		
	Assessment pattern:	As defined by Q	AA:					
		Written Examina	ntions = 50%, Pract	tica	Examinations =	0%, Coursework = 50%		
		As used by St Ar	ndrews:					
		Coursework = 10	00%					
	Re-Assessment pattern:	3-hour Written Examination = 100%						
	Module Co-ordinator:	Dr O Hazzard						
	Lecturer(s)/Tutor(s):	Dr O Hazzard						

N4418 American Poetry since 1950							
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2			
Academic year:	2016/7						
Planned timetable:	11.00 am - 1.00 pm Mon						
its important predecessors, reflect and engage with th Through a close study of a	oduction to the contemporary poetry of the United States, examining some of eccent poetic theory, ideas related to its regional poetries, ways in which poets a contemporary world, and in which they regard their roles and activities. number of poets, a sense will be gained of the role and importance of U.S. relation to the broader tradition. (Group E)						
Programme module type:	Group E Optional for English, section I for B.A. (Intl Hons) English						
Pre-requisite(s):	EN2003, EN2004						
Learning and teaching	Weekly contact	: 1 seminar and 1 tu	torial, and 2 optior	nal consultative hours.			
methods and delivery:	Scheduled learn	ing: 44 hours	Guided indepen	dent study: 256 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%						
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%						
Re-Assessment pattern:	3-hour Written Examination = 100%						
Module Co-ordinator:	Prof J P Burnside	Prof J P Burnside					
Lecturer(s)/Tutor(s):	Prof J P Burnside	2					

### EN4419 American Fiction: Self and Nation (1865 - 1939) SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 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)

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Programme module type:	Group E Optional for English, section I for BA (Intl Hons) English				
Pre-requisite(s):	EN2003, EN2004				
Learning and teaching	Weekly contact: 1 seminar and 1 tute	orial, and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr J D Byatt				
Lecturer(s)/Tutor(s):	Dr J D Byatt				

Creative Writing 2							
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2			
Academic year:	2016/7						
Planned timetable:	10.00 am Wed and 11.00 am Wed.						
	uction in creative writing through both reading and composition. Students will learn to veness of literary forms critically, and assessment will include submissions of original up E)						
Programme module type:	Group E Optional for English						
Pre-requisite(s):	EN2003, EN2004	EN4417, EN4500					
Learning and teaching methods and delivery:	Weekly contact hours.	: 1 seminar and 1	workshop, and 2 opt	ional consultative			
	Scheduled learn	ning: 44 hours	Guided indeper	ndent study: 256 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%						
	As used by St Andrews: Coursework = 100%						
Re-Assessment pattern:	3-hour Written	Examination = 100	%				
Module Co-ordinator:	Dr E Jones						
Lecturer(s)/Tutor(s):	Dr E Jones						

EN4420

### EN4422 Poetic Language SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7

11.00 am - 1.00 pm Tue, 12 noon Thu

Planned timetable:

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)

Programme module type:	Group E Optional for English				
Pre-requisite(s):	EN2003, EN2004				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour seminar, 1 x 1 hour seminar and 2 optional consultative hours.				
	Scheduled learning: 50 hours Guided independent study: 250 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr T Jones				
Lecturer(s)/Tutor(s):	Dr T Jones				

EN4423 Material Culture in Victorian and Modernist Fiction						
SCOTCAT Credits:	30 SCQF Level 10 Semester: 1					
Academic year:	2017/8					
Availability restrictions:	Availability to b	Availability to be confirmed closer to the time.				
Planned timetable:	3.00 - 5.00 nm 1	Γhu				

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)

Programme module type:	Group E Optional for English				
Pre-requisite(s):	EN2003, EN2004				
Learning and teaching	Weekly contact: 1 x 2-hour seminar,	and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr C M Alt				
Lecturer(s)/Tutor(s):	Dr C M Alt				

### EN4424 Nationalists and Nomads: Contemporary World Literature SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 2.00 pm - 4.00 pm Thu

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, nationalist struggles in India and Africa, state oppression and dictatorships in the New World, to globalisation and cosmopolitanism, this module is an opportunity to reflect on the pressures facing our global imagined communities in the late twentieth- and twenty-first-centuries.

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 1 x 2-hour seminar,	and 2 optional consultative hours.		
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 2			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr L M Burns			
Lecturer(s)/Tutor(s):	Dr L M Burns			

### **EN4425 Celtic Modernisms**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1		
Academic year:	2016/7					
Planned timetable:	10.00 am - 12.00 noon Tue					

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)

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 2 x 1-hour seminars and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr P MacKay			
Lecturer(s)/Tutor(s):	Dr P MacKay			

### EN4426 Civil Wars on Page and Screen SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 2.00 pm - 4.00 pm Mon, plus film viewing 2.00 pm - 5.00 pm Fri

In this module we shall be looking at literary and cinematic representations of a number of different instances of civil war from the twentieth and twenty-first centuries. In the process, we will focus on issues such as gender, race, class, family and 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. Questions we will be addressing include: What are the specific issues that are associated with civil wars?

Is there a particular kind of literature that comes out of civil wars? What role does literature play in our perceptions of civil wars? How might it help or hinder post-civil war reconciliation? What are the differences between literature of different genres, and between literature and cinema, when it comes to representing civil wars?

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching methods and delivery:	Weekly contact: 1 x 2-hour class and 2 optional consultative hours, and 3 hours of film viewing			
	Scheduled learning: 66 hours Guided independent study: 234 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Raychaudhuri			
Lecturer(s)/Tutor(s):	Dr A Raychaudhuri			

EN4427 The Shape of the Poem								
	SCOTCAT Credits: 30 SCQF Level 10 Semester: 1							
	Academic year: 2016/7							
	Planned timetable: 3.00 pm - 5.00 pm Tue							

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.

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 1 x 2-hour seminar and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Prof D Paterson			
Lecturer(s)/Tutor(s):	Prof D Paterson			

#### English - Honours Level - 2016/7 - August 2016

### EN4428 Imagining Ireland: Forging the Nation SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 2.00 pm - 4.00 pm Tue.

This module focuses on the first half century of modern Irish literature and looks at that literature from the perspective of emerging notions of national identity in Ireland. We will track developments in Irish literature and culture from the closing decade of the nineteenth century through to the opening decades of the post-independence era. Writers to be studied will likely include W. B. Yeats, James Joyce, Elizabeth Bowen and Flann O'Brien. Genres studied will include drama, fiction and poetry. Key issues to be addressed will extend to: how is national culture defined and created; what is the political function of literature; what role does literature have in challenging state-sponsored cultural orthodoxies.

	I			
Programme module type:	Group E - Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	ing and teaching Weekly contact: 2-hour seminar, and 2 optional consultative hours.			
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 256 ho			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Prof A Murphy			
Lecturer(s)/Tutor(s):	Prof A Murphy			

EN4430 Making Performance								
	SCOTCAT Credits: 30 SCQF Level 10 Semester: 2							
	Academic year: 2016/7							
	Planned timetable:	ed timetable: 12.00 noon - 2.00 pm Tue						

The twentieth and twenty-first centuries have seen a broad range of radical approaches to the task of making performance. This module will explore a range of these approaches, which may include physical theatre, theatres of cruelty, puppetry and mask, psychophysical performance and situationism. Through practical workshops, students will explore the intersections of theory and practice, developing their skills as both researchers and makers of performance. (Group E)

Note: As this is not an acting course, students will not be graded on their performing abilities, but on their understanding of performance techniques.

Programme module type:	Group E Optional for English			
Pre-requisite(s):	EN2003, EN2004			
Learning and teaching	Weekly contact: 2-hour practical classes, and 2 optional consultative hours.  Scheduled learning: 44 hours  Guided independent study: 256 hours			
methods and delivery:				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%  As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	New Coursework = 100%			
Module Co-ordinator:	Dr S Haddow			
Lecturer(s)/Tutor(s):	Dr S Haddow			

### EN4500 Playwriting SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 11.00 am Wed and 12.00 noon Wed.

Contemporary playwriting is flourishing in Britain, and this module will use the best examples of modern classic plays to unearth technique and skills that the students will then be asked to apply. The module aims to enable students to write for the theatre, to have an awareness of the creative process and to shape narrative into a scene or scenes. It is intended as an introduction to playwriting, and the expectation is that students will have little or no previous experience of playwriting, although a keen interest and enthusiasm for theatre is essential. The classes will combine an academic and a practical approach to developing writing: as well as formally studying the published works of established playwrights, we will also workshop the students' texts, and approach some exercises through improvisation. The module will also ask students to consider and evolve their view on the role of the playwright at a society level, and the cultural and political impact of a new play. (Group E)

Programme module type:	Group E Optional for English					
Pre-requisite(s):	EN2003, EN2004 Anti-requisite(s): EN4417, EN4420					
Learning and teaching						
methods and delivery:	thods and delivery: Scheduled learning: 44 hours Guided independent study: 2					
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	Mr O Emanuel and MS Z Harris					
Lecturer(s)/Tutor(s):	Mr O Emanuel and Ms Z Harris					

### English - Honours Level - 2016/7 - August 2016

EN4794 Joint Dissertation (30cr)						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.				
	Planned timetable:	To be arranged.				

The dissertation must consist of approximately 10,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Joint or Triple Honours in the School of English				
Pre-requisite(s):	A Letter of Agreement	Ar	nti-requisite(s):	More than 30 credits in other dissertation / project modules	
Learning and teaching	Weekly contact: As per Letter of A	Agre	eement.		
methods and delivery:	Scheduled learning: hours	Guided indepen		dent study: hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = %, Praction	cal E	xaminations = %,	Coursework = %	
	As used by St Andrews:				
	As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				
Module Co-ordinator:	As per Letter of Agreement.				

### **School of Geography & Geosciences**

### **Environmental Geography (EG) modules**

EG3020 Global Climate Change							
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	1		
	Academic year:	mic year: 2016/7 & 2017/8					
	Planned timetable:	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.

Programme module type:	Compulsory for MGeol Earth Sciences and BSc Environmental Earth Sciences.  Optional for Geography or Sustainable Development					
Pre-requisite(s):	Normally ES2002 or ES2003 or (GG2011 and GG2012) Anti-requisite(s): GG3265, GG3268					
Learning and teaching	Weekly contact: 2 x 1-hour lectur	es a	and 1 x 2-hour pra	ctical.		
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 106 h					
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews:  2-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4					
Module Co-ordinator:	Dr R Wilson					
Lecturer(s)/Tutor(s):	Dr R Wilson, Dr T Prave, Dr T Raub, Dr J Rae					

EG3031 S	Special Topic for Physical Geography					
	SCOTCAT Credits:	5	SCQF Level 9	Semester:	1	
	Academic year:	2016/7 & 2017/	10			
	Availability restrictions:	Available only to Geography students				
	Planned timetable:	To be arranged.				
	This module provides suppo	rt and guidance fo	t and guidance for geography students taking one of the Earth &			
	addition Geography MA an	lules offered as part of the Geography degree (normally ES3020-ES3030). In d BSc students taking 15-credit modules from the Science Faculty may find and this module provides the necessary credit top-up.				
	Programme module type:	Optional for Geography or Sustainable Development students also taking a 15-credit module in Earth & Environmental Sciences				
	Pre-requisite(s):	GG2011 and GG2012				
	Co-requisite(s):	EG3020 or ES30:	11			
	Learning and teaching	Weekly contact:	Occasional tutorial	S.		
	methods and delivery:	Scheduled learn	ing: 8 hours	Guided independent study: 42 hours		
	Assessment pattern:	As defined by Q	AA:			
		Written Examina	ations = 0%, Practica	al Examinations = 0	%, Coursework = 100%	
		As used by St Ar	ndrews:			
		Coursework = 100%				
	Re-Assessment pattern:	No Re-Assessment available				
	Module Co-ordinator:	Dr R Wilson				
	Lecturer(s)/Tutor(s):	Earth and Enviro	nmental Sciences s	taff		
L						

special Environmental To	ppic for Physica	ar Geography		
SCOTCAT Credits:	5	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/12			
Availability restrictions:	Only available to students on a Geography or Sustainable Development Honours programme.			
Planned timetable:	To be arranged.			
Environmental Science mod BSc students taking 15-cred this module provides the	apport and guidance for geography students taking one of the Earth & odules offered as part of the Geography degree. In addition Geography MA and edit modules from the Science Faculty may find themselves 5 credits short and e necessary credit top-up. The present module is designed to pair with ed modules such as ES3011 Global Biogeochemical Cycles.			
Programme module type:	Optional for Geography or Sustainable Development students also taking any ES3000-level module			
Co-requisite(s):	Normally EG302	0 or ES3011		
Learning and teaching	•	0 or ES3011 : 2-hours of tutoria	ıls (x 4 weeks)	
Learning and teaching	•	: 2-hours of tutoria	<u> </u>	pendent study: 42 hours
Learning and teaching methods and delivery:	Weekly contact Scheduled learn As defined by Q Written Examina	: 2-hours of tutoria ning: 8 hours AA: ations = 0%, Praction	Guided indep	pendent study: 42 hours = 0%, Coursework = 100%
Learning and teaching methods and delivery:	Weekly contact Scheduled learn As defined by Q	: 2-hours of tutoria ling: 8 hours AA: ations = 0%, Praction	Guided indep	·
Learning and teaching methods and delivery:	Weekly contact Scheduled learn As defined by Q Written Examina As used by St Ai	: 2-hours of tutoria ling: 8 hours AA: ations = 0%, Praction ndrews:	Guided indep	·
Learning and teaching methods and delivery: Assessment pattern:	Weekly contact Scheduled learn As defined by Q Written Examina As used by St Ai Coursework = 10	: 2-hours of tutoria ling: 8 hours AA: ations = 0%, Praction ndrews:	Guided indep	·

### **Earth Science (ES) modules**

eological Mapping				
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			
sections. It develops the st inferring how these structu	raining in independently constructing and interpreting geological maps ar student's abilities to recognise structures in both two and three dimensions actures have changed with time, to develop four-dimensional intellectual sk in defining geological sampling strategies and field report writing.			
Programme module type:	Compulsory for BSc Geology and BSc Environmental Earth Sciences, joint degrees with Biology and Chemistry, and MGeol Earth Sciences  Normally ES2001 and ES2002			
Pre-requisite(s):				
Required for:	ES3006, ES3010			
Learning and teaching methods and delivery:		map and cross-secti l occasional 2-hour f		ırs each) and lectures
	Scheduled learning	g: 19 hours	Guided indeper	ndent study: 131 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%  2-hour Written Examination = 100%  Dr T Prave  Dr T Prave			Coursework = 100%
Re-Assessment pattern:				
Module Co-ordinator:				
Lecturer(s)/Tutor(s):				

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
		SCQI LEVEL 9	Semester.	1
Academic year:	2016/7 & 2017/8			,
Planned timetable:	11.00 am - 1.00 pm Mon (analytical methods), 2.00 pm - 4.00 pm Thu (stats)			
Earth Sciences. Four key ar supervision. Statistical train statistics, (iii) probability, (i introduction to numerical method, relevant to their particularly the independen	ing includes (i) unde v) hypothesis testin methods. Each stud rown interests. Sk	rstanding data typ g using parametri ent will have an o kills taught here	pes, (ii) data present c statistics, (v) corre opportunity to resea	ation and basic descrip lation and regression, arch an unusual analyt
Programme module type:				
Pre-requisite(s):	Normally ES2001 a	and (ES2002 or ES2	.003)	
Required for:	ES3003, ES3008			
Learning and teaching methods and delivery:	Weekly contact: Loweek.	ectures, practicals,	tutorials and lab tim	ne averaging 5 hours pe
	Scheduled learning	g: 55 hours	Guided indepe	endent study: 95 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursewo		Coursework = 100%	
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Oral Examination = 100%  Dr A Finch			
Modue Co-ordinator:	Dr A Finch			

ES3003 G	S3003 GIS and Spatial Analysis for Earth Scientists				
	SCOTCAT Credits: 15 SCQF Level 9 Semester: 2				2
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	10.00 am - 1.00 pm Mon, Wed (lecture plus lab session) (Weeks 1 - 7)			n) (Weeks 1 - 7)
	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				

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.

Programme module type:	Compulsory for BSc Geology and Environmental Earth Science, and MGeol Earth Sciences				
Pre-requisite(s):	Normally ES3002	Normally ES3002			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 6 lectures and 14 practicals and support sessions (Weeks 1 - 7).				
	Scheduled learning: 48 hours Guided independent study: 102 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr R Robinson				
Lecturer(s)/Tutor(s):	Dr R Robinson				

ES3004 P	3004 Processes and Products in Sedimentary Systems				
SCOTCAT Credits: 15 SCQF Level 9 Semester: 2				2	
	Academic year:	2016/7 & 2017/8 9.00 am - 10.00 am Tue - Thu (lectures), 2.00 - 5.00 pm Mon (practical field days (9.00 am - 5.00 pm)			
	Planned timetable:				n Mon (practicals). 3
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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.

Programme module type:	Compulsory for BSc Geology, Environmental Earth Science, joint degrees with Biology and Chemistry, and MGeol Earth Sciences			
Pre-requisite(s):	Normally ES2001 and (ES2002 or ES2003)			
Learning and teaching methods and delivery:	Weekly contact: Weekly lectures and practicals averaging 6 hours per week plus field training			
	Scheduled learning: 54 hours Guided independent study: 96 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical	al Examinations = 0%, Coursework = 50%		
	As used by St Andrews:			
	2-hour Written Examination = 50%, 0	Coursework = 50%		
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4			
Module Co-ordinator:	Dr T Prave			
Lecturer(s)/Tutor(s):	Dr T Prave, Dr M Singer, Dr R Robinso	on, Mr S Allison		

# ES3006 Advanced Geological Mapping SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Not available to General Degree students. Planned timetable: 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 sessions on geophysics techniques and field-based skills training sessions and lab-based analysis of classic geology maps, followed by two one-week field courses. Field assessment comprises a geophyscial report, field notes and geological maps within holistic, problem-based exercises, determining the geology of the field 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.

The costs associated with this module are partially supported by the Department.

Programme module type:	Compulsory for BSc Geology, joint degrees with Biology and Chemistry, and MGeol Earth Sciences				
Pre-requisite(s):	ES3001				
Required for:	ES4001				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 8 practical sessions through semester plus two residential field excursions.				
	Scheduled learning: 88 hours Guided independent study: 62 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr A Finch				
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences sta	aff			

Planned timetable:

### ES3007 Structural Geology and Tectonics SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8

This module covers the principles of rock deformation and associated metamorphism, and the tectonic processes that drive this deformation. The goals of this module 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.

10.00 am - 12.00 noon Thu (lectures), 2.00 - 5.00 pm (practicals)

Programme module type:	Compulsory for BSc Geology and MGeol Earth Sciences			
Pre-requisite(s):	Normally ES2001 and ES2002			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour lecture (x 11 weeks), 7 x 3-hour practicals during the semester and fieldwork			
	Scheduled learning: 55 hours	Guided independent study: 95 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4			
Module Co-ordinator:	TBC			
Lecturer(s)/Tutor(s):	TBC			

#### **ES3008 Geochemistry**

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	SCOTCAT Credits:	15	SCQF Level 9	Semester:	1		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	10.00 am Tue ar	cals)				

This module provides an introduction to geochemistry: the study of the abundance, distribution and circulation of the chemical elements in minerals, rocks, soils, water and the atmosphere. Geochemical tools are a powerful means to the study of geological, economic and environmental problems. In the module we study the origin and distribution of the chemical elements in the Earth and solar system and review thermodynamics and kinetics as applied to Earth systems. We apply thermodynamics to make quantitative predictions regarding the outcome of chemical reactions associated with geological processes. We consider the behaviour of elemnts, mainly in low temperature ienvironments. Material covered includes use of stable and radiogenic isotopes, aqueous geochemistry and mineral precipitation and dissolution. We utilise geochemical tools to constrain changes in earth processes and climate, and to predict the impact of future change.

The module includes a field trip to study river geochemistry and multiple practical sessions to develop the lecture concepts.

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Programme module type:	Compulsory for BSc Environmental Earth Science, MGeol Earth Sciences, BSc Geology and joint degrees with Biology and Chemistry				
Pre-requisite(s):	Normally ES2001 and/or ES2003	Normally ES2001 and/or ES2003			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 17 lectures, 15 hours of laboratory classes, 2 or more field classes over the semester.				
	Scheduled learning: 54 hours Guided independent study: 96 hour				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4				
Module Co-ordinator:	Dr N Allison				
Lecturer(s)/Tutor(s):	Dr A Finch, Dr M Claire, Dr N Allison,	Dr J Rae, Dr A Burke			

### | SCOTCAT Credits: 15 | SCQF Level 9 | Semester: 1 | | Academic year: 2016/7 & 2017/8 | | Planned timetable: 9.00 am Tue and Thu (lectures); 2.00 pm - 5.00 pm Mon (practicals)

This is a core module within the BSc Geology and MGeol Earth Sciences degrees and delivered early in the Honours programme in order to provide 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, the Alps field course, Advanced Petrogenesis and Metallogeny.

Programme module type:	Compulsory for BSc Geology, joint degrees with Biology and Chemistry, and MGeol Earth Sciences Optional for Environmental Earth Science degree.		
Pre-requisite(s):	Normally ES2001 and ES2002		
Required for:	ES4006		
Learning and teaching methods and delivery:	Weekly contact: 2 x 1-hour lectures (x 11 weeks), 3-hour practicals most weeks.		
	Scheduled learning: 50 hours	Guided independent study: 100 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 50%, Coursework = 0%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, 2 x 2-hour Practical Examination = 50%		
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4		
Module Co-ordinator:	Dr A Finch		
Lecturer(s)/Tutor(s):	Dr A Finch, Dr S Mikhail		

#### **ES3010 Advanced Environmental Field Methods**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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 sessions on geophysics techniques and 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. The costs associated with this module are partially supported by the Department.

Programme module type:	Compulsory for BSc Environmental Earth Science			
Pre-requisite(s):	ES3001	ES3001		
Required for:	ES4008			
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 53 hours	Guided independent study: 97 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical E	xaminations = 0%, Coursework = 100%		
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Oral Examination = 100%			
Module Co-ordinator:	Dr M Claire			
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences staff	f		

### ES3011 Global Biogeochemical Cycles SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Environmental Earth Sciences and MGeol Earth Sciences		
	Optional for Geology, Biology and Ge	eology, Chemistry and Geology	
Pre-requisite(s):	Normally ES2002 or ES2003, and ES3008		
Learning and teaching methods and delivery:	Weekly contact: 2-hour lectures (x 6 weeks and only 1 hour in week 7) and 3-hour practical sessions (x 7 weeks).		
	Scheduled learning: 36 hours	Guided independent study: 114 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4		
Module Co-ordinator:	Dr A Zerkle		
Lecturer(s)/Tutor(s):	Dr A Zerkle, Dr M Claire, Dr S Mikhail		

### ES3012 Advanced Geological and Environmental Field Methods

SCOTCAT Credits: 15 SCQF Level 9 Semester: 2

Academic year: 2016/7 & 2017/8

Planned timetable: To be arranged.

This module combines geophysical, geological and environmental field training. It starts with lectures and practical sessions on geophysics field techniques and field-based skills training sessions, as well as advanced map interpretation sessions for classic geological regions in Scotland. The second part of the module involves a one-week residential field geology excursion to the famous Assynt region of the NW Highlands. The final part of the course is a second 4-day to 1 week field excursion where an environmental problem will be the focus of the training. Locations will vary from year to year depending on staffing, and could be in the UK or abroad. The department partially supports the financial costs associated with the fieldwork components.

	T					
Programme module type:	Compulsory for MGeol in Earth Sciences					
	Optional for Chemistry and Geolo	Optional for Chemistry and Geology				
Pre-requisite(s):	ES3001	ES3001 Anti-requisite(s): ES3006, ES3010				
Learning and teaching methods and delivery:	Weekly contact: Lectures and practical sessions followed by two residential field classes.					
	Scheduled learning: 100 hours		Guided indepen	dent study: 50 hours		
Assessment pattern:	As defined by QAA:					
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews:					
	Coursework = 100% (geophysics report = 33.3%; geological notebooks and maps = 33.3% and environmental report = 33.3%)					
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4					
Module Co-ordinator:	Dr T Prave					
Lecturer(s)/Tutor(s):	Dr R Bates, Dr M Claire, Dr A Zerk	le				

#### **ES3099 Field Methods in Geosciences**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Availability restrictions:	Available only to visiting students.				
Planned timetable:	none - field-base	ed module.			

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 NW Highlands region including the Moine thrust system, the Buchan and Barrovian metamorphic zones in the Dalradian terrane, and the Carboniferous sequences of NE England and Fife.

Programme module type:	Available to visiting students only.		
Pre-requisite(s):	Must be studying Earth Science at an overseas university		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : Occasional lectures, tutorials and practicals in addition to fieldwork - this is predominantly a residential field-based module.		
	Scheduled learning: 268 hours Guided independent study: 32 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	Dr R Robinson		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences sta	aff	

### | SCOTCAT Credits: 15 | SCQF Level 10 | Semester: 1 | | Academic year: 2016/7 & 2017/8 | | Planned timetable: 12 days fieldwork in August - September. 9.00 am - 5.00 pm Fri (practicals)

Building on the field training at Junior Honours level, 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, examining and synthesising all aspects of a region to interpret a complex geological history. 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 map and aerial photograph interpretation and the construction of cross-sections. The Department partially supports the costs associated with the fieldwork component of this module.

Programme module type:	Compulsory for BSc Geology Either ES4001 or ES4008 is compulsory for MGeol Earth Sciences			
Pre-requisite(s):	normally ES3006	normally ES3006		
Learning and teaching	Weekly contact: 2-week field course and 4 lab sessions.			
methods and delivery:	Scheduled learning: 84 hours Guided independent study: 66 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr T Prave			
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences sta	aff		

ES4002 Research Review, Essay and Seminar						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	BSc students may only take this module in semester 1, MGeol students can take this module in either semester.				
	Planned timetable:	Not applicable.	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.

Programme module type:	Compulsory for BSc Geology and Environmental Earth Science, and MGeol Earth Sciences		
Pre-requisite(s):	Admission to an Honours Earth Sciences programme or Environmental Earth Science		
Learning and teaching methods and delivery:	Weekly contact: Occasional lecture and 3 meetings with adviser spread across the semester.		
	Scheduled learning: 10 hours	Guided independent study: 140 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%		
	As used by St Andrews:		
	Practical Examination = 15%, Coursework = 85%		
Re-Assessment pattern:	Oral Examination = 100%		
Module Co-ordinator:	Dr S Mikhail and Dr T Raub		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences sta	aff	

## SCOTCAT Credits: 45 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to Single Honours BSc Earth Science students Planned timetable: Not applicable.

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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

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Programme module type:	Compulsory for BSc Geology and Environmental Earth Science			
Pre-requisite(s):	Admission to an Honours Earth Sciences programme or Environmental Earth Science			
Learning and teaching	Weekly contact: Regular meetings with supervisor arranged as required.			
methods and delivery:	Scheduled learning: 20 hours Guided independent study: 430 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	As used by St Andrews:			
	Proposal = 5%, Oral presentation = 10%, Dissertation = 85%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr T Raub and Dr S Mikhail			
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences sta	aff		

ES4007 Petroleum Exploration and Geophysics						
	SCOTCAT Credits: 15 SCQF Level 10 Semester: 1					
	Academic year:	Academic year: 2016/7 & 2017/8				
	Planned timetable:	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.

Programme module type:	Optional for BSc Geology, Environmental Earth Science, joint degrees with Biology and Chemistry, and MGeol Earth Sciences		
Pre-requisite(s):	Normally ES2001 and (ES2002 or ES2003)		
Learning and teaching methods and delivery:	Weekly contact: 17 lectures, 15 hours laboratory classes, field classes over the semester.		
	Scheduled learning: 38 hours Guided independent study: 112 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4		
Module Co-ordinator:	Dr R Bates		
Lecturer(s)/Tutor(s):	Dr R Bates		

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This module is designed to provide advanced field-based training in a variety of environmental and geochemical analytical techniques of utility to solving geo-environmental problems. The field course will be thematic and examine environmental aspects of a region using an integrated approach. Theme and location may vary. Additional post-trip analyses may include geophysical and remotely sensed data, GIS and laboratory work. The Department partially supports the costs associated with the fieldwork component of this module.

Programme module type:	Compulsory for BSc Environmental Earth Science		
	Either ES4001 or ES4008 is compulsory for MGeol Earth Sciences		
Pre-requisite(s):	ES3010		
Learning and teaching			
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr A Burke		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences s	staff	

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	SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	EITHER (ES4010 and CH4448) OR ID4441 are compulsory for joint degrees with Chemistry		
Pre-requisite(s):	Admission to Joint Honours Geology and Chemistry		
Learning and teaching	Learning and teaching methods and delivery:  Weekly contact: Regular meetings with supervisor arranged as required.  Scheduled learning: 20 hours  Guided independent study: 280 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%		
	As used by St Andrews:  Proposal = 5%, Oral Presentation = 10%, Dissertation = 85%		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	Dr S Mikhail and Dr T Raub		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences staff		

### ES4011 Work Placement in Earth Sciences SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 & 2017/8

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.

Programme module type:	ES4011 or ES4012 is compulsory for MGeol Earth Sciences		
Pre-requisite(s):	Normally ES2001 and ES2002 and Entry to MGeol Earth Schiences		
Learning and teaching	Weekly contact: Meetings.		
methods and delivery:	Scheduled learning: 0 hours	Guided independent study: 0 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	Dr R Robinson		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences staff		

#### **ES4012 Research Placement in Earth Sciences**

Planned timetable:

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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 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.

Programme module type:	ES4011 or ES4012 is compulsory for MGeol Earth Sciences		
Pre-requisite(s):	Normally ES2001 and ES2002 and Entry to MGeol Earth Sciences		
Learning and teaching	Weekly contact: Meetings.		
methods and delivery:	Scheduled learning: 0 hours	Guided independent study: 0 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	Dr R Bates		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences staff		

# SCOTCAT Credits: 5 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: Available to students on the MSc Geochemistry degree and Geography Honours programme. Planned timetable: To be arranged.

This module is designed to support students who do not have a strong background in the analytical methods used in Earth Science. These include, for example, students enrolled in BSc Geography or MSc Geochemistry degree programmes. The module comprises a series of seven lectures starting with the basic principles of accuracy and precision, which are then illustrated in the context of the most common analytical methods used in the geosciences. Students are asked to independently research an analytical method of interest. This is then presented in a poster imitating the poster sessions at major conferences. Posters are marked by both students (peer assessment) and staff (different weighting). The module will give students the necessary training to allow them to excel in other Earth Science modules.

Programme module type:	Optional for Geography or Sustainable Development students.		
Anti-requisite(s):	EG4031		
Co-requisite(s):	Any Level 4 or 5 module for BSc students.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 7 x 1-hour lectures and 1 x 8-hour poster presentation day over the semester.		
	Scheduled learning: 15 hours Guided independent study: 35 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework (Poster session) = 100%		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	Dr A Finch		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences sta	aff	

### SCOTCAT Credits: 15 SCQF Level 11 Semester: SUMMER Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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 successful 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. A (formatively assessed) presentation may be required if funding was provided by an external body. Some student groups may choose to use this module to carry out ambitious fieldwork in a remote setting. The students are responsible for finding the costs associated with the fieldwork component of this module, but external funding has been successfully won in recent years.

Programme module type:	Optional for MGeol in Earth Sciences.		
Pre-requisite(s):	Entry to Year 5 of MGeol Earth Sciences		
Learning and teaching			
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Oral Examination = 100%		
Module Co-ordinator:	Dr A Finch		

ES5003 Research Dissertation					
	SCOTCAT Credits:	60	SCQF Level 11	Semester:	Whole Year
	Academic year:	2016/7 & 2017/	8		

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".

Programme module type:	Compulsory for MGeol Earth Sciences.		
Pre-requisite(s):	Entry to Year 5 of MGeol Earth Sciences		
Learning and teaching Weekly contact: Regular meetings with supervisor a		ith supervisor arranged as required.	
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 570 ho		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:  Coursework = 100% (Project proposal = 5%, Oral Presentation = 10%, Dissertation = 85%)		
Re-Assessment pattern:	No Re-Assessment available		
Module Co-ordinator:	Dr S Mikhail and Dr T Raub		
Lecturer(s)/Tutor(s):	Earth and Environmental Sciences staff		

ES5005 Isotope Geochemistry: Theory, Techniques, and Applications					
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1
	Academic year:	2016/7 & 2017/8			
Planned timetable:		To be arranged.			

Isotope geochemistry has grown over the last 50 years to become one of the most important fields in the Earth sciences. The growth in the importance of isotope geochemistry reflects its remarkable success in solving fundamental problems in mantle formation, ore genesis, hydrology, hydrocarbon formation, crustal evolution, planetary formation, geochemical cycles, hydrothermal circulation, ocean circulation, and climate and environmental change. In this module, we will explore the theory of isotopes and their fractionation, including kinetic, equilibrium, and Rayleigh fractionation. We will also learn how isotope measurements are made, with an introduction to mass spectrometry methods, techniques, and analysis. The latter half of the course will be devoted to case studies and applications of isotopes to interesting problems across Earth Sciences including the evolution of the atmosphere, the formation of the solar system and planets, and climate and carbon cycle reconstructions. These case studies will introduce concepts such as clumped isotopes, isotope mass balance, mass independent fractionation, and radionuclide disequilibria.

Programme module type:	Optional for BSc Geology, BSc Environmental Earth Sciences and MGeol Earth Sciences.		
Pre-requisite(s):	For current BSc students, normally ES3008 or CH1401, CH1402, and CH2501.		
Learning and teaching methods and delivery:	Weekly contact: 2-hour lectures (x 10.5 weeks), 3-hour practical sessions (x 3 weeks)		
	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:  As defined by QAA:  Written Examinations = 0%, Practical Examinations		Examinations = 50%, Coursework = 50%	
	As used by St Andrews: 2-hour Practical (Open Book) Examination = 50%, Coursework = 50%		
Module Co-ordinator:	Dr A Burke		
Lecturer(s)/Tutor(s):	Dr P Savage		

### ES5006 Metallogeny SCOTCAT Credits: 15 SCQF Level 11 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 9:00 am - 11:00 am Thu (lectures); 9.00 am - 1.00 pm (practicals)\_

The module focuses on the geodynamic setting, age, geometry and mineralogy of the principal metallic mineral deposits using a holistic approach (structural geology, geochemistry, isotope geochemistry, sedimentology, igneous geology, metamorphic geology, and geophysics). Current genetic models of ore deposits are reviewed with an emphasis on the geological processes required to create them. Finally, a roadmap to mineral exploration for each type of ore deposit is discussed.

Laboratory exercises involve geological problem solving using a mineral exploration industry focus involving the examination of geological maps and representative suites of samples (thin sections, hand samples, and outcrops) from different types of metallic mineral deposits.

A single day field excursion will be to the gold mine at Cononish or the lead mine at Wanlockhead to cover the geological context of the ore bodies and aspects of their exploration and production.

Programme module type:	Optional for BSc Geology and MGeol Earth Sciences, and Joint Degree BSc Chemistry and Geology.			
Pre-requisite(s):	For current BSc & MGeol students, normally ES3009 or CH1401, CH1402, and CH2501.			
Learning and teaching methods and delivery:	Weekly contact: 1- or 2-hour lectures (23 hours over 11 weeks); 2-hour or 3-hour practical sessions (14 hours over 5 weeks); 4 hours of oral presentations; 9 hours of field work			
	Scheduled learning: 50 hours	Guided independent study: 100 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	As used by St Andrews: 2-hour Practical (Open Book) Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Practical (Open Book) Examination = 50%, Coursework = 50%			
Module Co-ordinator:	Dr J Cloutier			
Lecturer(s)/Tutor(s):	Dr A Finch			

### **ES5009 Geodynamics**

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	SCOTCAT Credits:	15	SCQF Level 11	Semester:	2	
	Academic year:	2017/8				
Planned timetable: 9.00 am - 10.00 am Tue and Wed; 9.00 am - 5.00 pm Fri (Wee			ri (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. 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.

Programme module type:	Optional for MGeol Earth Sciences, BSc Geology, Environmental Earth Science, and joint degrees in Biology and Chemistry.			
Pre-requisite(s):	Normally ES2001 and (ES2002 or ES2003)	OO2 Anti-requisite(s): ES4009		ES4009
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 50 hours		Guided independent study: 100 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4			
Module Co-ordinator:	TBC			
Lecturer(s)/Tutor(s):	Dr T Raub			

### SCOTCAT Credits: 15 SCQF Level 11 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Optional for MGeol Earth Sciences, BSc Geology, Environmental Earth Science, and joint degrees in Biology and Chemistry.		
Pre-requisite(s):	Normally ES3008		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1-hour lecture (x 10 weeks) 5 x 3-hour practical sessions and 1 x 8-hour session of project presentations over the semester.		
	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	2-hour Written Examination = 80%, Coursework = 20%, No Re-Assessment if Coursework mark is <4		
Module Co-ordinator:	Dr E Stueeken		
Lecturer(s)/Tutor(s):	Dr P Savage, Dr S Mikhail		

ES5011 Water in the Environment					
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	To be arranged.			

Water is fundamental to life on Earth and the functioning of healthy ecosystems and societies. However, fresh water is unevenly distributed across the continents, presenting challenges for maintaining adequate supplies to support ecosystem functioning and the growth and development of modern human society. Furthermore, humans interact with the hydrosphere in ways that contribute to degradation of water quality. These problems of water quantity and quality are exacerbated by fluctuations and trends in climate that contribute to accentuated flooding and drought cycles in particular regions. The ability of current and future generations to understand, predict, and ameliorate such problems requires a solid understanding of hydrology in terms of the hydrological cycle, its forcing by climate, portioning of water between surface and subsurface, water availability to ecosystems, the role of water in biogeochemistry, geochemistry associated with water, rock and/or soil interactions, or and the management of floods and water shortages. This course provides a combination of the underpinning hydrological theory and the analytical tools required to better understand and ameliorate problems of water in the environment. It will allow students to read and evaluate primary scientific research and it will challenge them to conduct modelling experiments to assess hydrological responses to various external factors. The module assessment will consist of analytical problem solving, simulated communication of hydrological science to government officials and the media, and an exam of short answers and essays.

Programme module type:	Optional for BSc Environmental Earth Science, MGeol Earth Science.		
Pre-requisite(s):	Normally ES3008 but students with relevant chemistry background considered.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 20 hours of lectures, 6 hours of laboratory work and 4 hours of tutorials over the semester.		
	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 15%, Coursework = 45%		
	As used by St Andrews:  2-hour Written Examination = 40%, Coursework (including Technical Brief, Media Interview and Qualitative analysis exercise) = 60%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Singer		
Lecturer(s)/Tutor(s):	Dr M Singer		

## **ES5013 Advanced Petrogenesis**

SCOTCAT Credits:	15	SCQF Level 11	Semester:	1		
Academic year:	2016/7					
Planned timetable:	10.00 am Mon and Tue (lectures). 10.00 - 1.00 pm Wed or Fri (practicals)					

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.

Programme module type:	Optional for BSc Geology and MGeol Earth Sciences			
Pre-requisite(s):	Normally ES3009			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 18 lectures, 15 hours of laboratory work, 18 hours of field-related study over the semester			
	Scheduled learning: 50 hours Guided independent study: 100 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 50%, Coursework = 0%			
	As used by St Andrews: 2-hour Written Examination = 50%, 3-hour Practical Examination = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%, No Re-Assessment if Coursework mark is <4			
Module Co-ordinator:	Dr A Finch			
Lecturer(s)/Tutor(s):	TBC			

## **ES5050 Earth's Greatest Hits**

SCOTCAT Credits:		15	SCQF Level 11	Semester:	2	
Academic year:		2016/7 & 2017/8				
Planned timetable:		Lectures: 11.00 am - 12.00 noon Thu, Seminars: 10.00 am - 1.00 pm Wed				

This module is based around current "hot topics" in Earth science research. It will introduce cutting-edge science questions about how our planet has evolved from a ball of molten rock to the habitable blue planet it is today, and some of the major changes in its chemistry, biosphere, and climate that have happened along the way. Topics will vary from year to year, depending on staff participating in the module and the advances in Earth science research.

This module is research-led, requiring that you read, digest, and discuss a number of topical papers each week. For some of these topics there is no given answer; instead you gain an in-depth understanding of the current state of research. Topics are introduced in lectures and then discussion seminars, organised around student presentations, are designed to encourage debate and critique of the arguments presented in the research papers.

Programme module type:	Optional for Earth Sciences MGeol, Environmental Earth Sciences BSc, Geology BSc.			
Pre-requisite(s):	Normally ES2001, ES2002 and/or ES2003 for BSc and MGeol students			
Learning and teaching methods and delivery:	Weekly contact: 7 hours of lectures and 21 hours of seminars over the semester.			
	Scheduled learning: 30 hours	Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 60%, Coursework = 40%			
	As used by St Andrews:  Coursework (10% participation in discussion groups; 60% oral presentations; 30% review paper) = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100% No Re-Assessment if Coursework mark is <4			
Module Co-ordinator:	Dr J Rae			
Lecturer(s)/Tutor(s):	Earth & Environmental Sciences academic and research staff			

## Geography (GG) modules

GG3100 Reconstructing Past Environments					
	SCOTCAT Credits: 20 SCQF Level 9 Semester: 1				1
	Academic year:	2016/7 & 2017/			
	Availability restrictions:	Available every year.  To be arranged.			
	Planned timetable:				

This module focuses on how we can use many strands of evidence to reconstruct past environments. Focusing on the period since the end of the last Ice Age (approximately the last 20,000 years), we discuss topics such as post-glacial sea level change, Holocene vegetation development and the prehistoric 'wildwood', and the changing nature of human impacts on the environment right up to the present day. The module includes field excursions and laboratory classes where you will learn to read the record of change locked up in peats, sediments and other environmental materials. Assessment includes a broad mixture of group and individual coursework, focused on using primary observations to understand how our world has changed over time.

Programme module type:	Optional for all degrees involving Geography			
Pre-requisite(s):	Passes at Grade 11 or better in GG2011, GG2012, or in SD2001			
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 4 weeks), 2-hour seminar (x 5 weeks), 2-hour practical classes (x 3 weeks), 4-hours fieldwork (x 3 weeks)			
	Scheduled learning: 32 hours Guided independent study: 168 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	As used by St Andrews:			
	Coursework (including 30% Lab/fieldwork) = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr K Roucoux			
Lecturer(s)/Tutor(s):	Various			

## GG3221 Geographies of Identity and Power SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2017/8 Availability restrictions: Offered on a two-year cycle Planned timetable: 2.00 pm - 4.00 pm Tue

Drawing on theories of gender and sexuality, this module charts how political questions about identity and power have become central to a broad range of contemporary issues. This module introduces key concepts in the theorisation of gender and sexuality, contextualises their development in the social sciences more generally, and applies them to a range of contemporary geographic issues including: power, segregation, inequality, representation and the political.

Programme module type:	Optional for all degrees involving Geography			
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour lecture (x 10 weeks) and 1 x 2-hour revision session.			
	Scheduled learning: 22 hours Guided independent study: 178 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr M B Sothern			
Lecturer(s)/Tutor(s):	Dr M B Sothern			

## GG3224 HIV/AIDS in sub-Saharan Africa

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
Academic year:	2017/8				
Availability restrictions:	Offered on a two-year cycle				
Planned timetable:	11.00 am - 1.00 pm Wed				

This module makes the case for a social-scientific, not merely biomedical understanding of HIV/AIDS in sub-Saharan Africa. It addresses the geographies of this phenomenon, exploring the politics of scaling, uneven global distributions, social contexts that facilitate its spread and the situatedness of sexual decision-making. The module investigates the role of gender relations, poverty, migration and youth. It also explores the everyday geographies of those living with AIDS, and evaluates proposed local and global solutions. The module is reading- and seminar-based. It utilises action-based assessment that challenges students to take their learning out of the classroom and transmit it to other contexts.

Programme module type:	Optional for all degrees involving Geography			
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002			
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 8 weeks), 1-hour seminar (x 8 weeks), 2-hour practical classes (x 2 weeks) and 1 x 2-hour feedback/revision session.			
	Scheduled learning: 22 hours Guided independent study: 178 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr M G Kesby			
Lecturer(s)/Tutor(s):	Dr M G Kesby			

## GG3227 Colonial and Postcolonial Geographies SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 Availability restrictions: Offered on a two-year cycle Planned timetable: To be arranged.

This module traces the historical geography of modern colonialism from its sixteenth-century beginnings in Spain's discovery and conquest of the New World, through to the break-up of European colonial empires after World War II, and up to what has been called 'the colonial present' and the 'new imperialism' (revolving around the USA and the 'war on terror'). Emphasis will be placed on how colonialism, past and present, operates as a logic of displacement and dispossession, and as both a conceptual space (imaginative geography) and physical space (material geography) of encounter and conflict and resistance involving a wide array of projects of colonisation and resistance.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture, 1 x 1-hour seminar (x 11 weeks) + 2 x 1-hour feedback/revision sessions			
	Scheduled learning: 24 hours Guided independent study: 176 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr D W Clayton			
Lecturer(s)/Tutor(s):	Dr D W Clayton			

## **GG3232** Housing, Community and Social-Spatial Justice

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
Academic year:	2017/8			
Availability restrictions:	Offered on a two-year cycle			
Planned timetable:	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.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development		
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture, 1 x 1-hour seminar (x 11 weeks) + 2 x 1-hour revision sessions		
	Scheduled learning: 22 hours Guided independent study: 178 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr K McKee		
Lecturer(s)/Tutor(s):	Dr K McKee		

# GG3234 Migration and Transnationalism SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 Availability restrictions: Offered on a two-year cycle Planned timetable: To be arranged.

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.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development		
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 hour lecture and 1 hour seminar (x 10 weeks) + 2 x 1-hour essay feedback and exam revision sessions.		
	Scheduled learning: 22 hours Guided independent study: 178 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr D McCollum		
Lecturer(s)/Tutor(s):	Dr D McCollum		

## GG3237 Political and Cultural Geographies of the Border SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2017/8 Availability restrictions: Offered on a two-year cycle Planned timetable: 12.00 noon - 2.00 pm Tue

This module focuses on a critical analysis and empirical reflection on the border and its functions, to better appreciate borders' paradoxical cultural and political roles. It will provide a framework for understanding contemporary bordering practices, their role in processes of identity-building and the constitution of belonging and difference within the fields of political and cultural geography. It will provide an introduction to the multi-disciplinary arenas of border studies, critical geopolitics, and biopolitics. An understanding of the over-arching power of discourse will be central to this course; the examples used will provide students with a deeper appreciation of how discourses work in the transmission of knowledge and the legitimisation of action. This module will challenge students to think about the complex functions of the border and their deeply political nature.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012, or in SD2001 and SD2002			
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour lecture (x 11 weeks) 1 x 1-hour seminar (x 11 weeks) 2 hours feedback and additional exam prep sessions			
	Scheduled learning: 24 hours Guided independent study: 176 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	As used by St Andrews:			
	1-hour Written Examination = 40%, Coursework = 60%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr S Leahy			
Lecturer(s)/Tutor(s):	Dr S Leahy			

## GG3262 Climate and Weather Systems

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Availability restrictions:	Availability TBC - Offered on a two-year cycle				
Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development, or - by arrangement - Environmental Geoscience		
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 hours lectures and 2 hours seminars (x 5 weeks) + 2 x 1-hour essay feedback and exam revision sessions		
	Scheduled learning: 22 hours Guided independent study: 178 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Prof D I Benn		
Lecturer(s)/Tutor(s):	Prof D I Benn		

## GG3263 Glaciers and Glaciation SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 Availability restrictions: Availability TBC - Offered on a two-year cycle Planned timetable: To be arranged.

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.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development, or - by arrangement - Environmental Geoscience		
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 37 hours Guided independent study: 163 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Prof D I Benn		
Lecturer(s)/Tutor(s):	Prof D I Benn		

GG3264	G3264 Oceans and Climate					
	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
	Academic year:	2016/7				
	Availability restrictions:	Availability - TBC - Offered on a two-year cycle				
	Planned timetable:	To be arranged.				
	The oceans play a key role in the global climate system. The aim of this module is to foster are 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.					
	Programme module type:	Optional for all degrees involving Geography or Sustainable Development, or - by arrangement - Environmental Geoscience				
	Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012				
	Learning and teaching methods and delivery:		: 1 x 1-hour lecture, ssion during the ser		r (x 11 weeks) + 1 x 1-	
		Scheduled learn	ning: 23 hours	Guided indeper	ndent study: 177 hours	
	Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
		As used by St Andrews: Written Examination = 60%, Coursework = 40%				
	Re-Assessment pattern:	2-hour Written Examination = 100%				
	Module Co-ordinator:	Prof W E N Aust	in			
	Lecturer(s)/Tutor(s):	Prof W E N Aust	in			

# GG3271 Coastal Processes SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2017/8 Availability restrictions: Availability - TBC - Offered on a two-year cycle. Planned timetable: 2.00 pm - 4.00 pm Thu

The majority of the world's population live in close proximity to the coastal zone. Coastal processes are highly dynamic and sensitive to external drivers, including long-term climate change and anthropogenic activities. Understanding these systems is important for developing appropriate coastal management strategies. Coasts (and coastal processes) therefore represent an excellent opportunity to study the interactions between humans and their physical environment.

The module aims to enhance students' understanding of environment-shaping processes and to offer advanced field-based training in the coastal environment. Including practical classes and an obligatory, reasonably priced, weekend field excursion, it encourages students to think about the ways in which process knowledge can inform coastal management.

Programme module type:	Optional for all degrees involving Geography, or Sustainable Development and - by arrangement - Environmental Geoscience		
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012 and/or SD2001 and SD2002		
Anti-requisite(s):	GG3067		
Learning and teaching	Weekly contact: Weekly lectures.		
methods and delivery:	Guided independent study: 170 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, C	coursework = 40%	
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Prof W E N Austin		
Lecturer(s)/Tutor(s):	Prof W E N Austin		

# GG3272 Biogeography SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2017/8 Availability restrictions: Offered on a two-year cycle Planned timetable: 11.00 am - 2:00 pm Thu

Biogeography is the study of the geographical distribution of organisms, and it is at the heart of our understanding of Earth system function. Controlled by numerous interacting physical and biological factors operating on a wide range of temporal and spatial scales, biogeography is critical to understanding past, present and future trajectories of ecosystem change. In this module we will study some of the many active and fascinating debates in the field of biogeography including the application of fundamental biogeographical principles to current conservation policy. Teaching is through a combination of lectures, seminars and workshops, plus one half-day field excursion.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development, or - by arrangement - Environmental Geoscience		
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012 and/or SD2001 and SD2002		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1-hour lecture, (X 11 weeks), 1-hour seminar (x 6 weeks) 2-hour workshops(x 4 weeks) 6-hour fieldwork (x 1 week)		
	Scheduled learning: 31 hours Guided independent study: 169 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practica	al Examinations = 0%, Coursework = 60%	
	As used by St Andrews:		
	2-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	Students will have to resit the failed component(s) in order to obtain a capped mark of 7 for the module as a whole, completing one or more of the following:		
	- A 1500 word report, following the format of Assessment 1, using a different, secondary dataset (30%)		
	- A 1500 word guide to the biogeography of a selected region (i.e. a different region to the first attempt; 30%)		
	- A two-hour written exam (40%).		
Module Co-ordinator:	Dr I Lawson		
Lecturer(s)/Tutor(s):	Dr I Lawson, Dr K Roucoux		

## GG3273 Scrutinising Segregation: Geographies of Diversity and Inequality SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged

Is Britain residentially segregated? How do we know this? What social and population processes shape segregation? Along what lines (race, religion, class) is segregation considered? Why does segregation matter? How has the question of the patterning of where people live become connected to international relations and national security?

Through consideration of these questions we will think critically about diversity and inequality, and how these salient social themes have been thought about academically and politically. We will examine the evidence on segregation and how this has been appropriated and misappropriated, and we will discover what Geographers can contribute, conceptually and methodologically, to these debates.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development		
Pre-requisite(s):	(GG2011 and GG2012) OR (SD2001 and SD2002)		
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour seminar (x 11 weeks), 1 x 1-hour lecture (x 11 weeks)		
	Scheduled learning: 22 hours Guided independent study: 176 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr N Finney		
Lecturer(s)/Tutor(s):	Dr N Finney		

G3301	301 Special Topic for Joint or Major Honours in Geography (Junior Honours)					
	SCOTCAT Credits:	10	SCQF Level 9	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Entry to a Joint of	or Major Honours p	rogramme in Geog	raphy.	
	Planned timetable:	To be arranged.				
	with the subject matter of balance the workload acros	allow Joint or Major Honours students in their Junior Honours year to engage f a selected 20-credit optional module in Geography (GG3221 - GG3289) yet loss the four semesters of their Honours programme. Students complete the len module but undertake a separate assessment.  Optional for Joint Honours Geography and all 'Geography with' degrees				
	Programme module type:					
	Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012  Weekly contact: 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.				
	Learning and teaching methods and delivery:					
		Scheduled learn	ing: 23 hours	Guided indepen	ndent study: 77 hours	
	Assessment pattern:	As defined by Q Written Examina		al Examinations = 0	%, Coursework = 100%	
		As used by St Andrews: Coursework = 100%				
	Re-Assessment pattern:	Coursework Essa	ay = 100%			
	Module Co-ordinator:	Dr U Demsar				
	Lecturer(s)/Tutor(s):	Various				

GG3302 Special Topic for Honour	302 Special Topic for Honours in Geography (Senior Honours)					
SCOTCAT Credits:	10	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/	8				
Availability restrictions:	Entry to a Joint of	or Major Honours p	rogramme in Geogi	raphy		
Planned timetable:	To be arranged.					
matter of a selected 20-cred	allow Honours students in their Senior Honours year to engage with the subject dit optional module in Geography (GG3221 - GG3289) yet balance the workload of their Honours programme. Students complete the contact hours of their ke a separate assessment.					
Programme module type:	Optional for Joint Honours Geography, all 'Geography with' degrees and Single Honours students also taking ID4001 or ID4002.					
Pre-requisite(s):	Passes at Grade 11 or better in GG2011 and GG2012					
Required for:	Single Honours Geography students also taking ID4001 or ID4002					
Learning and teaching methods and delivery:	Weekly contact: Students undetake 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.					
	Scheduled learn	ing: 23 hours	Guided indepen	dent study: 77 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews:					
Do Assessment nettering	Coursework = 100%					
Re-Assessment pattern:	Coursework Essa	ay = 100%				
Module Co-ordinator:	Dr U Demsar					
Lecturer(s)/Tutor(s):	Various					

## **GG4201 Advanced Debates in Geography**

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	SCOTCAT Credits:	10	SCQF Level 10	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Core - available every year.				
	Planned timetable:	11.00 am - 1.00 pm Tue				

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.

Programme module type:	Compulsory core for Single Honours Geography Optional for all 'Geography with' degrees		
Pre-requisite(s):	1 of SG3201 - SG3204		
Learning and teaching	Weekly contact: 6 x 2-hour seminars during the semester.		
methods and delivery:	Scheduled learning: 12 hours Guided independent study: 88 ho		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews:		
	2-hour Written Examination = 100%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Leahy		
Lecturer(s)/Tutor(s):	Team taught		

## **GG4297 Joint Honours Research Dissertation in Geography**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Core - available every year.			
Planned timetable:	To be arranged.			

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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/).

Programme module type:	Compulsory for Joint Honours Geography				
Pre-requisite(s):	GG3202, SG3202	An	ti-requisite(s):	GG4298	
Learning and teaching methods and delivery:	Weekly contact: Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor)				
	Scheduled learning: 8 hours Guided independent study: 292 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Dissertation = 100%				
Re-Assessment pattern:	Oral Examination = 100%				
Module Co-ordinator:	Dr S Leahy				
Lecturer(s)/Tutor(s):	Team taught				

# GG4298 Research Dissertation in Geography SCOTCAT Credits: 50 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Core - available every year. Planned timetable: To be arranged.

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 as an oral presentation. (Guidelines for printing and binding dissertations can be found at:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Compulsory core for Single Honours Geography, all 'Geography with' degrees				
Pre-requisite(s):	SG3201 or SG3203 Anti-requisite(s): GG4297		GG4297		
Learning and teaching methods and delivery:	Weekly contact: 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				
	Scheduled learning: 16 hours Guided independent study: 490 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Dissertation and Conference presentation = 100%				
Re-Assessment pattern:	Oral Examination = 100%				
Module Co-ordinator:	Dr S Leahy				
Lecturer(s)/Tutor(s):	Team taught				

. Advanced Study for Joint or Major Honours in Geography					
SCOTCAT Credits:	10	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Entry to a Joint of	or Major Honours p	rogramme in Geog	raphy	
Planned timetable:	To be arranged.				
with the subject matter of balance the workload acros	allow Joint or Major Honours students in their Senior Honours year to engage a selected 20-credit optional module in Geography (GG3221 - GG3289) yet is the four semesters of their Honours programme. Students complete the en module but undertake a separate assessment, at 4000-level (an advanced				
Programme module type:	Optional for all degrees involving Geography except Single Honours				
Pre-requisite(s):	Entry to a Joint or Major Honours programme in Geography, and normally a pass in one of SG3202 or SG3203				
Learning and teaching methods and delivery:	Weekly contact: Students undetake 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.				
	Scheduled learn	ing: 23 hours	Guided indeper	ndent study: 77 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	Coursework Essay = 100%				
Module Co-ordinator:	Dr U Demsar				
Lecturer(s)/Tutor(s):	Various				

## **Sustainable Development (SD) modules**

SD3221 Frontiers in Sustainability Research: Do Good Lives Cost the Earth?					
	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
	Academic year:	2016/7			
	Availability restrictions:	Offered on a two-year cycle.			
	Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for all degrees involving Sustainable Development or Geography		
Pre-requisite(s):	Passes at grade 11 or better in (SD2001 and SD2002) or (GG2011 and GG2012)		
Learning and teaching methods and delivery:	<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		
	Scheduled learning: 30 hours Guided independent study: 170 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%		
	As used by St Andrews:  Coursework = 40%, 2-hour Written Examination = 60%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr L A Reid		
Lecturer(s)/Tutor(s):	Dr L A Reid		

SD3222 Governance for Sustainability					
	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
	Academic year:	2017/8			
	Availability restrictions:	Offered on a two-year cycle.			
	Planned timetable:	9.00 - 11.00 am Mon, ocassional 9.00 am - 11.00 am Wed			

The Earth's environment has become a major focal point of international conflict and cooperation. Responding to the growing threats of climate change and energy insecurity, countries have signed over 700 international treaties designed to protect and manage the environment. Just as importantly, they have developed elaborate tools and systems for observing and modelling the behaviour of the global environment and translating this knowledge into policy advice. At the same time, global challenges demand action from local, national and transnational actors. This course provides a broad overview of developments and patterns in the practical, theoretical and political dimensions of multi-level governance as they have emerged over the past three decades. In so doing, a wide range of policy case studies are explored including energy, climate change, oceans and marine planning.

Programme module type:	Optional for all degrees involving Sustainable Development or Geography		
Pre-requisite(s):	Passes at grade 11 or better in (SD2001 and SD2002) or (GG2011 and GG2012)		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture plus 1 x 1-hour seminar (x 11 weeks) plus 2 x 3-hour seminars		
	Scheduled learning: 26 hours Guided independent study: 174 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr T A Stojanovic		
Lecturer(s)/Tutor(s):	Dr T A Stojanovic, D McCauley		

## SD3224 Introduction to Environmental Economics SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2017/8

9.00 am - 11.00 am Wed

Planned timetable:

This module introduces students to the contributions that environmental economics can make to helping us understand and manage a wide range of environmental problems. We also study the insights which economics provides on the relationship between economic growth and environmental quality, and the measurement of sustainability. No prior knowledge of economics is presumed, and a course textbook is available which is cowritten by one of the course lecturers.

Programme module type:	Optional for all degrees involving Sustainable Development or Geography			
Pre-requisite(s):	Passes at grade 11 or better in (SD2001 and SD2002) or (GG2011 and GG2012)			
Anti-requisite(s):	SD5023			
Learning and teaching	Weekly contact: 1 x 1-hour lecture (x 11 weeks), 1 x 1-hour seminar (x 11 weeks)			
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 178 ho			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 10%, Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Prof N Hanley & Dr E McLaughlin			
Lecturer(s)/Tutor(s):	Prof N Hanley & Dr E McLaughlin			

## SD3225 Transitioning to Sustainability: The Nature of Community in Multi-level Governance and Action for Sustainability

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
Academic year:	2017/8				
Availability restrictions:	Offered on a two-year cycle.				
Planned timetable:	10.00 am - 12.00 noon Fri				

Sustainability will never be achieved only through state intervention. A shift towards management models includes an emphasis on community as an essential component of multi-level governance for sustainability. In this module we will explore how communities of place, interest, practice and value can contribute to the transition to sustainability. We will examine how community interacts with other sectors, explore learning, adaptation and resilience in communities and pursue the trend for alternative economies. We will draw on examples from the global north and south. In addition, we will critique the contested concept of community itself, acknowledging issues relating to heterogeneity, representation and relationality.

Programme module type:	Optional for all degrees involving Sustainable Development or Geography			
Pre-requisite(s):	Passes at grade 11 or better in (SD2001 and SD2002) or (GG2011 and GG2012)			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture (x 11 weeks), 1 x 1-hour seminar (x 11 weeks) 5-hour practical session (x 1 week), 10-hour fieldwork (x 1 week)			
	Scheduled learning: 37 hours Guided independent study: 163 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr R White			
Lecturer(s)/Tutor(s):	Dr R White			

# SD3237 Placing Sustainability: Knowledge & Wellbeing for the Anthropocene SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2017/8 Availability restrictions: Offered on a two-year cycle. Planned timetable: To be arranged.

This module engages with debates on the culturally shaped idea of sustainabilty and how it changes geographically across place. This will be discussed through a variety of ethnographic examples, especially indigenous peoples of Latin America. The module will bring together for the first time and discuss in critical and novel ways three distinct yet interrelated bodies of literature and debates, namely the scholarships on sustainability, well-being and ways of knowing. The critical engagement with scholarly and policy debates on knowledge, "alternative" knowledge, indigenous ways of knowing, and their relationship with 'well-being' will be core to the module, to challenge and disrupt mainstream sustainability scholarship.

Programme module type:	Optional for all degrees involving Sustainable Development or Geography			
Pre-requisite(s):	Passes at grade 11 or better in (SD2001 and SD2002) and/or GG2012 and/or SA2002			
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour lecture (x 5 weeks), 1 x 1-hour seminar (x 5 weeks) 40-hour fieldwork (x 2 weeks)			
	Scheduled learning: 90 hours Guided independent study: 110 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr E Ferraro			
Lecturer(s)/Tutor(s):	Dr E Ferraro	·		

SD4299 Dissertation in Sustainable Development					
SCOTCAT Credits:		60	SCQF Level 10	Semester:	Whole Year
Academic year:		2016/7 & 2017/8			
Availability restriction	ons:	Core - Available only to students who intend an Honours Degree in Sustainable Development.			
Planned timetable:		To be arranged.			

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. 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 as an oral presentation.

Programme module type:	Compulsory for Sustainable Development					
Pre-requisite(s):	One of SG3201 - SG3204	One of SG3201 - SG3204 Anti-requisite(s): SD4002				
Learning and teaching methods and delivery:	Weekly contact: 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					
	Scheduled learning: 16 hours Guided independent study: 584 hours					
Assessment pattern:	As defined by QAA:					
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews:					
	Dissertation and Conference Paper = 100%					
Re-Assessment pattern:	Oral Examination = 100%					
Module Co-ordinator:	Dr S Leahy					
Lecturer(s)/Tutor(s):	Team taught					

## Geography & Geosciences Honours Level - 2016/7 - August 2016 Sustainable Geography (SG) modules

SG3201 Single Honours Research Design and Methodology Training (60)						
	SCOTCAT Credits:	60	SCQF Level 9	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Not available to General Degree Students.				
	Planned timetable:	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.

Programme module type:	Compulsory core for Single Honours Geography and one of SG3201 - SG3204 is compulsory for Sustainable Development				
Pre-requisite(s):	Passes at Grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)	Anti-requisite(s):	SG3202 - SG3204		
Required for:	SG4221-8, One of SG3201 or SG3203-4 is required for GG4298. One of SG3201-4 is required for SD4299				
Learning and teaching methods and delivery:	Weekly contact: 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				
	Scheduled learning: 150 hours Guided independent study: 450 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	No Re-Assessment available				
Module Co-ordinator:	Dr U Demsar				
Lecturer(s)/Tutor(s):	Team taught				

# SG3202 Joint Honours Research Design and Methodology Training (30) SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Not available to General Degree Students. Planned timetable: To be arranged.

This module occupies a central place in our field-based research-orientated degrees. It prepares students to undertake their independent 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. 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.

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Programme module type:	Compulsory core for Joint Honours Geography One of SG3202 or SG3203 is compulsory for Geography with Persian, Geography with Social Anthropology, Geography with Spanish			
	One of SG3201 - SG3204 is compuls	ory for Sustainable	Development	
Pre-requisite(s):	Passes at Grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)	Anti-requisite(s):	SG3201, SG3203 - SG3204	
Required for:	SG4221 - SG4228, GG4297			
Learning and teaching methods and delivery:	Weekly contact: Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 7.5 weeks).			
	Scheduled learning: 75 hours Guided independent study: 225 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr U Demsar	Dr U Demsar		
Lecturer(s)/Tutor(s):	Team taught			

# SG3203 Research Design and Methodology Training (50) SCOTCAT Credits: 50 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Not available to General Degree Students. Planned timetable: To be arranged.

This module occupies a central place in our field-based research-orientated degrees. It prepares students to undertake their independent 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. 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.

Programme module type:	One of SG3202 or SG3203 is compulsory for Geography with Persian, Geography with Social Anthropology, Geography with Spanish One of SG3201 - SG3204 is compulsory for Sustainable Development				
Pre-requisite(s):	Passes at grade 11 or better in GG2011 and GG2012 or SD2001 and SD2002	Anti-requisite(s):	SG3201- SG3204, SD3203		
Required for:	SG4221 - SG4228, One of SG3201 or SG3203-4 is required for GG4298. One of SG3201-4 is required for SD4299				
Learning and teaching methods and delivery:	Weekly contact: aries 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.				
	Scheduled learning: 125 hours Guided independent study: 375 hours				
Assessment pattern:	As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	No Re-Assessment available				
Module Co-ordinator:	Dr U Demsar				
Lecturer(s)/Tutor(s):	Team taught				

## SG3204 Research Design and Methodology Training (40) SCOTCAT Credits: 40 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Not available to General Degree Students. Planned timetable: 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 research-based residential fieldclass organised around the design and implementation of a specific research project. The module provides fundamental training for the independent Senior Honours dissertation project.

Programme module type:	One of SG3201 - SG3204 is compuls	ory (Core) for Sustai	nable Development		
Pre-requisite(s):	Passes at grade 11 or better in GG2011 and GG2012 or SD2001 and SD2002	Anti-requisite(s):	SG3201, SG3202, SG3203, SD3204		
Required for:	SG4221- SG4228, One of SG3201 or SG3203-4 is required for GG4298. One of SG3201-4 is required for SD4299				
Learning and teaching methods and delivery:	Weekly contact: Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 8 weeks) plus a fieldclass.				
	Scheduled learning: 104 hours Guided independent study: 296 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	No Re-Assessment available				
Module Co-ordinator:	Dr U Demsar				
Lecturer(s)/Tutor(s):	Team taught				

SG3229 Environmental Management in Scotland						
	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
	Academic year:	2016/7				
	Availability restrictions:	Offered on a two-year cycle.				
	Planned timetable:	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.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)			
Learning and teaching methods and delivery:	Weekly contact: 1 x 2-hour lecture (x 10 weeks) + 2 x 1-hour feedback/revision sessions and a 1-day (8 hour) field excursion.			
	Scheduled learning: 30 hours Guided independent study: 170 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	As used by St Andrews: 2-hour Written Examination = 60%, Practical Examination = 20%, Coursework = 20%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr C R Warren			
Lecturer(s)/Tutor(s):	Dr C R Warran			

## SG3272 Socio-ecological Systems

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Availability restrictions:	Offered on a two-year cycle.				
Planned timetable:	To be arranged.				

This module examines how we can use records of the past to understand human-environment interactions over the timescales on which climate change plays out. It will present key concepts and theories for understanding the complex dynamics of socio-ecological systems, and illustrate how careful consideration of palaeoenvironmental, archaeological and historical data can be used to understand how past societies coped with climatic stresses and managed finite resources. We also consider how knowledge of the past can inform current and future thinking about social resilience and conservation management. The module uses case studies from the Old and New Worlds, including North Atlantic, Pacific Islands, and the African savanna.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)			
Learning and teaching	Weekly contact: 1-hour lecture (x 11 v	weeks), 1-hour seminar (x 11 weeks).		
methods and delivery:	Scheduled learning: 20 hours	Guided independent study: 176hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%  As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Davies			
Lecturer(s)/Tutor(s):	Dr A Davies and Dr R Streeter			

## **SG4221 Review Essay**

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SCOTCAT C	Credits:	20 SCQF Level 10 Semester: 1				
Academic	year:	2016/7 & 2017/8				
Availability	restrictions:	Core - available every year				
Planned tir	metable:	4.00 pm - 6.00 pm	ı Thu			

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.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes in one of SG3201 - SG3204			
Learning and teaching methods and delivery:	Weekly contact: Introductory lecture and seminar (2 hours) followed by guided independent study (one-to-one supervision)			
	Scheduled learning: 2 hours Guided independent study: 198 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Review Essay = 100%			
Module Co-ordinator:	Dr S Leahy			
Lecturer(s)/Tutor(s):	Team taught			

## **SG4222 Advanced Qualitative Analysis**

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SCOTCAT Credits:	20	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	11.00 am - 1.00 pi	m Thu			

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.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes in one of SG3201 - SG3204			
Learning and teaching methods and delivery:	Weekly contact: 2-hour lecture (x 4 weeks), 2-hour seminar (x2 weeks), 2-hour practical (x3 weeks)			
	Scheduled learning: 18 hours Guided independent study: 182 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Coursework project = 100%			
Module Co-ordinator:	Dr D Clayton			
Lecturer(s)/Tutor(s):	Team taught			

## **SG4223 Advanced Quantitative Analysis**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	2.00 pm - 4.00 pm Tue and Thu				

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.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes in one of SG3201 - SG3204			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2-hour lectures, 2-hour seminars, 1-hour practical classes each week for 7 weeks, and occasional tutorials.			
	Scheduled learning: 38 hours Guided independent study: 162 hou			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 13%, Coursework = 87%			
	As used by St Andrews: Practical Examination = 13%, Coursework = 87%			
Re-Assessment pattern:	Coursework project = 100%			
Module Co-ordinator:	Dr A Marshall			
Lecturer(s)/Tutor(s):	Team taught			

## SG4224 Advanced Topics in Physical Sciences SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am - 1.00 pm Tue and 9.00 am - 11.00 am Thu

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. Three 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 three 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.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes in one of SG3201 - SG3204			
Learning and teaching	weeks) and 1 x 1-day (4 hour) field class.			
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 178 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Coursework project = 100%			
Module Co-ordinator:	Dr I Lawson			
Lecturer(s)/Tutor(s):	Team taught			

# SG4228 Advanced Topics in Geographic Information Science (GISci) SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: Available every year. Planned timetable: 10.00 am - 12.00 noon Mon and Fri, and 2.00 pm - 4.00 pm Mon and Fri

The first part of the module explores advanced GIS and spatial analysis techniques for use with geographic datasets. Students will gain theoretical and applied knowledge in order to study and describe spatial patterns in geographic data. Theoretical understanding will be emphasised through lectures and readings. Labs/practicals will be designed to provide students with hands-on experience applying theory and techniques to datasets spanning human and environmental geography using applications including crime, forestry, health, environmental change, and housing. Focus will be placed on methods for analysing spatial point patterns, spatial autocorrelation, and spatial modelling.

In the second part, students will engage in a small research project of their choosing to showcase their new advanced GIS skills. The project will allow students to use GIS and spatial analysis techniques to address a chosen problem in either of the social, physical, or environmental sciences. Students with domain knowledge in human geography, physical geography, or sustainable development will be able to tailor GIS projects to their own applications.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	SG3201-4 Unit 2a OR Unit 3 AND SG3201-4 Unit 6			
Learning and teaching methods and delivery:	Weekly contact: 2 hours lectures (x 9 weeks), 2-hour practical classes (x 6 weeks), 2-hour IT Lab Help sessions (x 3 weeks)			
	Scheduled learning: 36 hours Guided independent study: 164 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework project = 100%			
Module Co-ordinator:	Dr J Long			
Lecturer(s)/Tutor(s):	Dr J Long, Dr U Demsar			

## **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

ommunication in History					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Available only to students in the Second year of the Honours Programme.				
Planned timetable:	To be arranged.				
This module is a part of 'C substantial experience of a wan area of interest in communicipants in the placemen permission of the Director of	vorking environmer nunicating themes t module. Students	nt. This component in History to conte will normally take	offers the opportu emporary contexts. e this module in Se	nity to further develop . It is available only to	
Programme module type:	With permission, this is an optional module (taken with ID4002) for History, Single Honours Mediaeval History, Middle East Studies, Modern History, Scottish History				
Co-requisite(s):	Usually ID4002				
Learning and teaching	Weekly contact: Fortnightly tutorials.				
methods and delivery:	Scheduled learning	ng: 6 hours	Guided indeper	ndent study: 144 hours	
Assessment pattern:	As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0%, Coursework = 10				
	As used by St And Coursework = 100				
Re-Assessment pattern:		(it can be on the sa g the same questio	-	as the original project	
Module Co-ordinator:	Dr C McGladderv				

## History - Honours Level - 2016/7 - August 2016

HI4794 J	oint Dissertation (30cr)					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Available only to students in the Second year of the Honours Programme, w have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project				
	Planned timetable:	To be arranged.				

This module is designed to encourage the development of skills of historical analysis through the concentrated study of a topic agreed between the student and two appropriate members of staff in different disciplines and Schools (who act as supervisors). 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 (though it must break new ground and use substantially new research). The topic and range of sources should be chosen in consultation with the supervisors in order to determine that the student has access to sources as well as a clear plan of preparation. The outcome is assessed on the quality of the library research and analysis shown in the written submission (an extended essay up to 8,000 words - 75%) and on the oral presentation of the findings to other students and two tutors (25%).

(Guidelines for printing and binding dissertations can be found at:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Joint or 'with' Honours in the School of History				
Pre-requisite(s):	A Letter of Agreement	Anti-requisite(s):		More than 30 credits in other dissertation / project modules	
Learning and teaching	Weekly contact: As per Letter of Agreement.				
methods and delivery:	Scheduled learning: 8 hours	Guided independent study: 294		ndent study: 294 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%				
	As used by St Andrews:				
	As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				
Module Co-ordinator:	As per Letter of Agreement.				

# HI4997 Recording the Past SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Second year of the Honours Programme. Planned timetable: To be arranged.

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.

Programme module type:	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.			
Anti-requisite(s):	HI4998, HI4999, ME4998, CL4999			
Learning and teaching	Weekly contact: Weekly seminars, fieldwork and film/video viewing.			
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 278 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	5,000-word essay (it can be on the same general subject as the original project, but not addressing the same question)			
Module Co-ordinator:	Prof G DeGroot			
Lecturer(s)/Tutor(s):	Prof G DeGroot			

## History - Honours Level - 2016/7 - August 2016

HI4998 Honours Project in History					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	Available only to students in the Second year of the Honours Programme.			
	Planned timetable:	To be arranged.			

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.

Programme module type:	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.		
Anti-requisite(s):	HI4997, HI4999		
Learning and teaching	Weekly contact: Fortnightly tutorials.		
methods and delivery:	Scheduled learning: 12 hours	Guided independent study: 288 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	5,000-word essay (it can be on the same general subject as the original project, but not addressing the same question)		
Module Co-ordinator:	Dr J Rose		

# HI4999 Honours Dissertation in History SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Second year of the Honours Programme. Planned timetable: To be arranged.

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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

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Programme module type:	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.			
Anti-requisite(s):	HI4997, HI4998, ME4998, CL4999 or a o	dissertation in another subject		
Learning and teaching methods and delivery:	Weekly contact: •In week 12 of Semester 1, for a preliminary organisational meeting with confirmed supervisor. •In week 0 or 1 of Semester 2, to discuss the overall progress and plan of further work, and the dissertation plan and indicative bibliography (which must be submitted by Friday of week 2). •In an informal (but compulsory) presentation of the topic and progress so far, to a staff member and between two and four other students, in week 4. •To give detailed feedback on draft material (which must be submitted by Friday of week 5). •In up to three further meetings arranged at the student's request during the semester.			
	Scheduled learning: 8 hours Guided independent study: 292 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Dissertation = 100%			
Re-Assessment pattern:	5,000-word essay (it can be on the same general subject as the original project, but not addressing the same question)			
Module Co-ordinator:	Prof S Maclean			

## History - Honours Level - 2016/7 - August 2016 Mediaeval History (ME) modules

The Mediaeval Castle				
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.s	t-andrews.ac.uk/h	istory/infoug/ugtim	etable
This module surveys the archifrom the eleventh to the fifte the other to selected areas elemphasis will be on archaeolo	eenth centuries. Ab sewhere, notably Fr	out half the time i rance, Spain, the B	s devoted to castles altic lands and the C	in the British Isles and rusader Levant. The
Programme module type:	Optional for Ancient History & Archaeology, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the Honours Adviser	History	Anti-requisite(s):	ME3411
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours		Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr A D Stewart			
Lecturer(s)/Tutor(s):	Dr A D Stewart			

Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			
or Istanbul, capital first of th continuous geographical space moments; and how it change the urban economy, imperia	detailed historical introduction to one of the greatest cities in history: Constantinople of the Byzantine and then of the Ottoman Empire. We will be studying the city as a all space stretching across a millenium and a half; its structure and life at certain key hanged over time. Specific themes to be considered include defense and provisioning, apperial and sacred space, and perception by inhabitants and visitors. Sources include atives, and other literary texts, as well as archeological and architectual plans and ants.			
Programme module type:	Optional for Ancient History & Archaeology, History, Mediaeval History,			

SCQF Level 9

Semester:

2

ME3163 The Imperial City: Byzantine and Ottoman Constantinople

30

**SCOTCAT Credits:** 

Programme module type:	Optional for Ancient History & Archaeology, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser	Ar	Anti-requisite(s): ME3218, ME4854		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learning: 33 hours		Guided independent study: 267 hour		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr D Kastritsis				

ME3206	3206 Heretics and Social Outcasts in Western Europe					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
	Academic year:	2016/7				
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				
		se and spread of heresy in the West. It explores in particular the reasons why reactions and compares and contrasts the treatment of heretics with that giver				
	Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.				
	Pre-requisite(s):	Permission of the	History Honours Ac	lviser		
	Learning and teaching	Weekly contact: 1	x 2-hour seminar,	plus 1 office hour.		
	methods and delivery:	Scheduled learnin	g: 33 hours	Guided indepen	dent study: 267 hours	
	Assessment pattern:	As defined by QA	<b>A</b> :			
		Written Examinati	ons = 60%, Practica	I Examinations = 89	%, Coursework = 32%	
		As used by St And	rews:			
		3-hour Written Examination = 60%, Coursework = 40%				
	Re-Assessment pattern:	4,000- to 5,000-word essay = 100%  Prof F E Andrews				
	Module Co-ordinator:					
	Lecturer(s)/Tutor(s):	Prof F E Andrews				

ME3214 Italian City States: from Communes to Signorie c. 1000- c. 1350					
SCOTCAT Credits:	: 30 SCQF Level 9 <b>Semester</b> : 2				
Academic year:	2016/7				
Planned timetable:	See http://ww	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

The aim of this module is to explore the changing nature and impact of urban life in a moment of great creativity in Italy, tracing the transition from the first appearance of the Communes to government by individual lords or 'Signorie'. Topics covered will include: urban growth and the origins of the Commune, the character of Communal government, expansion into the Contado, the development of faction, the first despots, civil life, guilds and merchants, patron saints and confraternities, violence and civil disorder. The reading will be from primary sources in translation whenever possible.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical	Examinations = 0%, Coursework = 40%		
	As used by St Andrews:			
	3-hour Written Examination = 60%, Co	ursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Prof F Andrews			
Lecturer(s)/Tutor(s):	Prof F Andrews			

### ME3233 Power and Identity after Rome 500 - 700 SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7

 Planned timetable:
 See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar,	olus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern: As defined by QAA:				
	Written Examinations = 60%, Practica	Examinations = 13%, Coursework = 27%		
	As used by St Andrews:			
	3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr J Palmer			
Lecturer(s)/Tutor(s):	Dr J Palmer			

### **ME3237 Legal Cultures in Late Antiquity**

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	nned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

Late Antiquity (fourth to early seventh centuries CE) is a historical period marked by rapid and striking political, social, religious and legal change. This module examines the 'legal cultures' that developed during this formative era. Students will learn how to use and understand formal legal sources - including Roman (imperial), Rabbinic, Sasanian and 'barbarian' codes and expert legal literature - as historical sources, anchored in specific situations and contexts. We will also explore curse tablets and prayers for justice from the 'under-policed' worlds of Britain and Iberia, as well as the establishment of 'universal' Christian conciliar canons and monastic rules. What distinguishes law and legal practice in the manuscript cultures of Late Antiquity from law and legal practice in mediaeval or modern societies?

Programme module type:	Optional for Ancient History, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Prof C Humfress			
Lecturer(s)/Tutor(s):	Prof C Humfress			

### ME3238 Holy Lives in Late Antiquity SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

Self-representation tends to be something that we take for granted in today's modern world: from 'selfies' on Instagram, to lifestyle blogs on the internet, to 'kiss and tell' celebrity exposés and published memoirs. What forms did inwardness, selfhood and self-representation take in Late Antiquity? This module examines how elite and non-elite individuals understood and represented 'the self ' between the fourth and early sixth centuries CE, with a focus on early Christian holy lives. We will explore 'the first introspective autobiography in Western letters': Augustine of Hippo's Confessions, as well as other less well-known first-person narratives / reported experiences (all in English translation), alongside visual and material evidence where relevant.

Programme module type:	Optional for Ancient History, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, pl	us 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof C Humfress		
Lecturer(s)/Tutor(s):	Prof C Humfress		

### ME3303 The Renaissance in Scotland 1450 - 1550 SCOTCAT Credits: 30 SCQF Level 9 Semester:

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Modern History, Scottish History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 2		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator: Prof R Mason			
Lecturer(s)/Tutor(s):	Prof R Mason		

### ME3304 Age of Conquest: Edward I - Scotland and Wales (1239 - 1307) SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable.

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 form 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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Scottish History and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2 hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern: As defined by QAA:				
	Written Examinations = 60%, Praction	cal Examinations = 0%, Coursework = 40%		
	As used by St Andrews:			
	3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Prof M Brown			
Lecturer(s)/Tutor(s):	Prof M Brown			

ME3305 Normans, Natives and Norsemen: Scotland c.1050 to 1250						
	SCOTCAT Credits:	30 SCQF Level 9 Semester: 2				
Academic year: 2016/7						
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable.				

This module explores the creation of the Scottish kingdom in the eleventh to twelfth centuries. The period sees the institutional and territorial unification of the mainland territories of the kingdom, a process which was a pre-requisite for the development of the durable identity which was to preserve the nation not simply through the Wars of Independence but also through subsequent periods of Union with England. The module will be structured thematically rather than chronologically looking at the cultural and political development of the kingdom. In the first part of the module the themes investigated will primarily be discrete areas of cultural and institutional development. In the second part we shall work through the different frontiers of the kingdom in turn (South, West, North and East).

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Scottish History and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2 hour seminar, pl	us 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews: 3-hour Written Examination = 60%, Co	ursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr N McGuigan			
Lecturer(s)/Tutor(s): Dr N McGuigan				

### ME3420 Rich and Poor in the Later Middle Ages SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching			
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr A Del Campo		
Lecturer(s)/Tutor(s):	Dr A Del Campo		

ME3423 Justifying Mediaeval Warfare					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
	Academic year: 2016/7				
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	ar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 8%, Coursework = 32%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr R Cox		
Lecturer(s)/Tutor(s):	Dr R Cox		

### ME3425 The Age of Revolt (1250 - 1450) SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7

**Planned timetable:** See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, p	lus 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 ho		
Assessment pattern:	As defined by QAA: Written Examinations = 20%, Practical Examinations = 0%, Coursework = 80%		
	As used by St Andrews:  1-hour Written Examination (Class Test) = 20%, Coursework = 80%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr J M Firnhaber-Baker		
Lecturer(s)/Tutor(s):	Dr J M Firnhaber-Baker		

### ME3426 Women and Gender in the Later Middle Ages

		<u> </u>		
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 15%, Coursework = 55%		
	As used by St Andrews: 2-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr A Del Campo		
Lecturer(s)/Tutor(s):	Dr A Del Campo		

### ME3427 Nature and the Occult in the Late Middle Ages 30 SCQF Level 9 **SCOTCAT Credits:** 1 Semester: Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module explores how late medieval European society understood its place in the universe. From the twelfth century onwards, Latin Christendom achieved advances in a number of areas of learning, partly as a result of increased contact with Arab and Greek knowledge. Students will examine developments in areas such as geography, natural philosophy, astronomy, and medicine, as well as looking at various occult practices such as magic, alchemy, and necromancy. The subjects touch upon what was the often blurry divide between categories such as natural and supernatural, magic and science, reason and faith, and licit and illicit.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.  Scheduled learning: 33 hours  Guided independent study: 267 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr R Cox		
Lecturer(s)/Tutor(s):	Dr R Cox		

ME3602 The Crusades					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
	Academic year: 2016/7				
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			etable

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.

See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

Programme module type:	Optional for Ancient History & Archaeology, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, p	olus 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 26		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof C Hillenbrand		
Lecturer(s)/Tutor(s):	Prof C Hillenbrand		

### ME3608 Eastern Approaches: Early Mediaeval Armenia c. 500 - 750 SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module explores Armenian political, social and cultural history in the early mediaeval period. It examines Armenian engagement with the great powers of the day, Rome and Persia as well as Armenian responses to the dramatic reconfiguring of the Near East in the seventh century, when the old order was swept away and replaced by a dynamic Islamic polity. Issues of identity, orthodoxy and heroic history will be studied through a selection of translated extracts from sources originally in Armenian, Greek and Arabic. These sources will be assessed critically and in conjunction with numismatic and epigraphic evidence. This module offers an opportunity to study an early mediaeval Christian society on the eastern fringe of the Roman world and invites comparison with the post-Roman West.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies and B.A. (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, pl	us 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr T W Greenwood		
Lecturer(s)/Tutor(s):	Dr T W Greenwood		

### ME3611 The Eastern Roman Empire in the Reign of Justinian 527 - 565

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

This module explores the political, social and cultural history of the Empire of New Rome, centred on Constantinople, in the sixth century. Themes covered will include: external relations with established neighbours (Sasanian Persia) and recent arrivals (Ostrogoths in Italy, Slavs and Avars in the Balkans); contemporary theological controversies; society and economy in Egypt and the eastern Mediterranean; plague and holy men; artistic and literary culture (primarily through the works of the historian Procopius); faction, riot and urban disorder; imperial ideology; gender and representations of Theodora. Translated extracts from sources in Greek, Latin, Syriac, Armenian and Coptic will be studied. Some material, numismatic and papyrological evidence will also be introduced.

Programme module type:	Optional for Ancient History & Archaeology, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser  Anti-requisite(s): ME3228			
Learning and teaching	Weekly contact: 1 x 2-hour seminar	, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided indepe	ndent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 8%, Coursework = 32%			
	As used by St Andrews:			
	3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr T W Greenwood			
Lecturer(s)/Tutor(s):	Dr T W Greenwood			

### ME3613 The Formation of Islamic Iran: From the Arab Conquests to the Seljuq Empire (600 - 1200) SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7

Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

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.

Programme module type:	Optional for Ancient History & Archaeology, History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History	
Pre-requisite(s):	Permission of the History Honours Adviser	
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 15%, Coursework = 45%	
	As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60%	
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%	
Module Co-ordinator:	Dr A Bdaiwi	
Lecturer(s)/Tutor(s):	Dr A Bdaiwi	

### ME3617 The Mamluks And The Mamluk Sultanate

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.  Scheduled learning: 33 hours  Guided independent study: 267 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr A D Stewart		
Lecturer(s)/Tutor(s):	Dr A D Stewart		

### History - Honours Level - 2016/7 - August 2016

ME4710 England and France at War in the Fourteenth Century				
SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year
Academic year:	2016/7	2016/7		
Availability restrictions:	Available only to students in the Second Year of the Honours Programme.			
Planned timetable:	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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Anti-requisite(s):	ME4904		
Learning and teaching	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 88 hours Guided independent study: 512 h		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%		
	As used by St Andrews:  2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr R Cox		
Lecturer(s)/Tutor(s):	Dr R Cox		

# ME4712 'A Century of Iron': Rulers, Warriors and Scholars in Tenth-Century England and Germany SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the second year of Honours Programme Planned timetable: 9.30 am - 12.30 pm Wed

The tenth century has traditionally been dismissed as a dark chapter in western European history, a 'century of iron' in which inelegant warlords lorded it over the wreckage of the Carolingian Empire, dissolute popes presided over a corrupt 'pornocracy' in Rome, and pagan raiders menaced the frontiers of Christendom. In the last 20 years, however, study of the period has been revitalised, and the tenth century is now at the centre of a series of fascinating debates about political power, economic change and the origins of Europe itself. This module explores the dynamics of the era via a comparative exploration of Germany and England under two of their most powerful rulers, Otto 'the Great' (936-73) and Edgar 'the Peaceful' (959-75) respectively. We will utilise a wide range of contemporary sources (narrative, documentary, artistic and archaeological) to examine and compare these intimately connected but strikingly different kingdoms. Topics include the nature and construction of royal power; invasion, conquest and warfare; aristocratic culture; political ritual; church reform; queens and queenship; economic change; the writing of history; and relations with the Byzantine and Islamic worlds.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 6%, Coursework = 34%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof S MacLean		
Lecturer(s)/Tutor(s):	Prof S MacLean		

## ME4806 The Age of Charlemagne c. 750 - 830 SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the Second Year of the Honours Programme. Planned timetable: 9.30 am - 12.30 pm Wed

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology and BA (Intl Hons) History.	
Learning and teaching	Weekly contact: 1 x 3-hour meeting, plus 1 office hour.	
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%	
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%	
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%	
Module Co-ordinator:	Dr J Palmer	
Lecturer(s)/Tutor(s):	Dr J Palmer	

ME4807 The Early Mendicants: Francis, Clare and Dominic (c. 1180 - c. 1270)				
	SCOTCAT Credits:	60 SCQF Level 10 Semester: Whole Year		
	Academic year:	2016/7		
	Availability restrictions:	Available only to students in the Second Year of the Honours Programme.		ours Programme.
	Planned timetable:	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.

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Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 3-hour seminar, p	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.	
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 6%, Coursework = 34%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof F E Andrews		
Lecturer(s)/Tutor(s):	Prof F E Andrews		

# ME4852 From Leo VI to Basil II: Byzantium in the Tenth Century SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the Second Year of the Honours Programme. Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

The tenth century witnessed the political and cultural revival of Byzantium following two centuries of dour military struggle, impoverishment and introspection. Byzantium took advantage of a fragmented Muslim polity to push eastwards, seizing territory and attracting Armenian, Arab and Kurdish clients into its orbit. Byzantium also sought to resolve its relationship with an expanding Bulgarian state, uncomfortably close to Constantinople both geographically and ideologically. In Semester 1, this module will trace the interaction of Byzantium with its immediate neighbors and distant powers through a wide range of translated extracts and material evidence. There were acute differences of opinion over the direction and rate of expansion, prompting civil war although never secession. In semester 2 we shall examine the economic and social foundations of Byzantium, the role of the court in Constantinople and the workings of the administration. The revival in literary, artistic and architectural activity will be placed against this backdrop.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies and BA (Intl Hons) History.		
Anti-requisite(s):	ME4812		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 3-hour seminar plus 1 office hour and occasional practicals and lectures.		
	Scheduled learning: 88 hours Guided independent study: 512 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 6%, Coursework = 34%		
	As used by St Andrews:		
	2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr T W Greenwood		
Lecturer(s)/Tutor(s):	Dr T W Greenwood		

### History - Honours Level - 2016/7 - August 2016

ME4998 Honours Dissertation in Mediaeval Archaeology					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	Available only to students in the Second year of the Honours Programme			
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

Specialised dissertation of 10,000 - 12,000 words on a topic in Mediaeval Archaeology for Honours students in the Mediaeval History and Archaeology degree. 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 a member of staff (in most cases 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Compulsory for Mediaeval History & Archaeology.		
Anti-requisite(s):	HI4997, HI4998, HI4999		
Learning and teaching methods and delivery:	Weekly contact: • In week 12 of Semester 1, for a preliminary organisational meeting with confirmed supervisor. •In week 0 or 1 of Semester 2, to discuss the overall progress and plan of further work, and the dissertation plan and indicative bibliography (which must be submitted by Friday of week 2). •In an informal (but compulsory) presentation of the topic and progress so far, to a staff member and between two and four other students, in week 4. •To give detailed feedback on draft material (which must be submitted by Friday of week 5). •In up to three further meetings arranged at the student's request during the semester.		
	Scheduled learning: 8 hours	Guided independent study: 292 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical E	xaminations = 0%, Coursework = 100%	
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	5,000-word essay (it can be on the same general subject as the original project, but not addressing the same question)		
Module Co-ordinator:	Dr A Woolf		
Lecturer(s)/Tutor(s):	Dr A Woolf		

### Modern History (MO) modules

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

The Early Reformation in	n Europe (1517 -	1555)			
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				
The central question address sporadic progress elsewhere	development of the Reformation as a European movement in the period of 1555 essed is why, having made such an impact on Germany, the Reformation made only ere. Cases studied include France, England, the Netherlands, Spain and Italy. The explores the different media of conversion through which the evangelical message				
Programme module type:	Optional for Histo	ry, Modern History	and BA (Intl Hons)	History.	
Pre-requisite(s):	Permission of the	History Honours Ad	dviser		
Learning and teaching	Weekly contact:	1 x 2-hour seminar,	plus 1 office hour.		
methods and delivery:	Scheduled learning	ng: 33 hours	Guided indepen	ndent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 40%, Coursework = 60%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	<b>4,000- to 5,000-word essay = 100%</b>				

Dr M McLean

Dr M McLean

The Life of the Mind: Key	y Texts in Europ	ean Thought (1	512 - 1697)		
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7		•		
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			etable	
Enlightenment. The class w	tory of European thought between the late Renaissance and the beginning of the lill study (in translation) some of the most important texts from this perion avelli, Montaigne, Grotius, Bacon, Hobbes and Bayle.				
Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser		Anti-requisite(s):	MO3049	
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learni	ng: 33 hours	Guided indeper	ndent study: 267 hour	
Assessment pattern:	As defined by QA	A:			
	Written Examinat	tions = 60%, Practi	cal Examinations = 1	3%, Coursework = 27%	
	As used by St And				
	3-hour Written Ex	xamination = 60%,	Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr D Allan				
Lecturer(s)/Tutor(s):	Dr D Allan	Dr D Allan			

### MO3027 Women and Men in Europe (1500 - 1800)

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7 See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			
Planned timetable:				

What were relations between women and men like during the early modern period? This module will assess the impact of major intellectual and social movements - the Renaissance, the Reformation and the Scientific Revolution - on legal, scientific and philosophical ideas about women. It will also examine women's day-to-day experiences, focusing on themes such as marriage and the family, sexuality and the body, work and religion. It will explore notions of masculinity and femininity, considering how these were constructed and how their meanings have changed over time.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:  3-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:					
Module Co-ordinator:					
Lecturer(s)/Tutor(s): Dr B Heal					

### MO3038 War and the State in the Era of the "Military Revolution" (1550 - 1730)

Trui und die State in die Erd of the Trimital'y Nevolution (1556–1756)					
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adv	viser	
Learning and teaching	Weekly contact: 1 x 2-hour seminar, p	lus 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof G Rowlands		
Lecturer(s)/Tutor(s):	Prof G Rowlands		

## MO3040 From Cradle To Grave: Living and Dying in Early Modern England (c. 1500 - 1800) SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser	Anti-requisite(s):		MO3015	
Learning and teaching	Weekly contact: 1 x 2-hour semina	r, pl	us 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided indep		Guided indepen	endent study: 267 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%				
	As used by St Andrews:				
	3-hour Written Examination = 60%,	, Cοι	ursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Prof R A Houston				
Lecturer(s)/Tutor(s):	Prof R A Houston				

MO3043 Early Modern Rome (1300 - 1667)						
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year: 2016/7						
	Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			etable		

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.

Programme module type:	Optional for History, Mediaeval History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser				
Learning and teaching	Weekly contact: 1 x 2-hour seminar, p	lus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 40%, Practical	Examinations = 13%, Coursework = 47%			
	As used by St Andrews:				
	2-hour Written Examination = 40%, Co	ursework = 60%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr J Condren				
Lecturer(s)/Tutor(s):	Dr J Condren				

### **MO3044 Topics in Renaissance Venice**

Topies in Renaissance Vernee						
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2		
Academic year:	2016/7	2016/7				
Planned timetable:	See http://wv	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Mediaeval History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser				
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%				
	As used by St Andrews: 3-hour Written Examination = 60%	5, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%  TBC  TBC				
Module Co-ordinator:					
Lecturer(s)/Tutor(s):					

### MO3047 The Tudors: Power and Piety in Sixteenth-Century England

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7 See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			
Planned timetable:				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser	Anti-requisite(s):		MO3045, MO3908	
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267		dent study: 267 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%				
	As used by St Andrews:				
	2-hour Written Examination = 40%, Coursework = 60%				
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr J Rose				
Lecturer(s)/Tutor(s):	Dr J Rose				

## MO3048 Witches and Witch-hunting in Early Modern Europe SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr B Heal			
Lecturer(s)/Tutor(s):	Dr B Heal			

### MO3063 Pirates and Privateers in Early Modern Scottish History SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

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.

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Programme module type:	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:  3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Prof S Murdoch			
Lecturer(s)/Tutor(s):	Prof S Murdoch			

### MO3080 The Iranian World from the Timurids to the Safavids (1370 - 1722)

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies, Modern History and BA (Intl Hons) History			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 h			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr A Peacock			

### MO3081 The Ottoman Empire 1300 - 1700 SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module studies the development of the early modern Ottoman Empire from its rise and definitive establishment in the late Middle Ages until the end of the seventeenth century. In addition to knowledge of key events and institutions, the module aims to provide an introduction to the culture and social composition of the empire in the period under examination. Specific themes include Ottoman expansion in Europe and the Middle East; crisis and change; 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 the empire and wider world.

Programme module type:	Optional for History, Mediaeval History, Mediaeval History & Archaeology, Mediaeval Studies, Middle East Studies, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser	Anti-requisite(s): ME3610			
Learning and teaching	Weekly contact: 1 x 2-hour semina	r, pl	us 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hou			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Practi	ical I	Examinations = 13	3%, Coursework = 27%	
	As used by St Andrews:				
	3-hour Written Examination = 60%,	, Coı	ursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr D Kastritsis				
Lecturer(s)/Tutor(s):	Dr D Kastritsis				

### History - Honours Level - 2016/7 - August 2016

MO3113 Stuart Rule and Revolution (1603 - 1689)							
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
	Academic year:	2016/7					
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable					

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser	An	ti-requisite(s):	MO3045
Learning and teaching	Weekly contact: 1 x 2-hour semina	nour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hou		ndent study: 267 hours
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr J Rose			
Lecturer(s)/Tutor(s):	Dr J Rose			

### MO3166 Debating Britain: Anglo-Scottish Unionism 1521 - 1707 SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module examines the idea of Britain as it was discussed and debated in the century between the union of the Anglo-Scottish crowns in 1603 and the union of the Scottish and English parliaments in 1707. In many respects the political and religious history of 17th century Britain can be understood as a series of attempts to make the fortuitous dynastic union of 1603 work in a way that would accommodate the interests and aspirations of the constituent parts of the multiple monarchy that the Stuart dynasty now presided over. Despite the often tumultuous events of the period, including civil war, regicide and revolution, there was little or no interest in dissolving the union. The union of parliaments of 1707, therefore, needs to be placed in the context, not just of immediate circumstances, but of a much longer series of attempts to fashion a workable British union.

Programme module type:	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Prof R Mason			
Lecturer(s)/Tutor(s):	Prof R Mason			

MO3214 The Decline and Fall of the French Old Regime (1715 - 1789)							
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
	Academic year:	2016/7					
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable					

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.  Scheduled learning: 33 hours  Guided independent study: 267 hou			
methods and delivery:				
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Prof G Rowlands			
Lecturer(s)/Tutor(s):	Prof G Rowlands			

### MO3222 French Fancy and Cool Britannia? Franco-British Cultural Relations from Seven Years' War to French Revolution

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, p	olus 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%  As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr S Easterby-Smith		
Lecturer(s)/Tutor(s):	Dr S Easterby-Smith		

### MO3223 South Asia and the European Encounter (c. 1700 - 1857)

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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 module 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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching			
methods and delivery: Scheduled learning: 33 hours Guid		Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 5%, Coursework = 35%		
	As used by St Andrews:  3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr A Yechury		
Lecturer(s)/Tutor(s):	Dr A Yechury		

### MO3263 British Culture in the Eighteenth Century SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.standrews.ac.uk/history/infoug/ugtimetable

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.

Programme module type:	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.  Scheduled learning: 33 hours  Guided independent study: 267 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr D Allan		
Lecturer(s)/Tutor(s):	Dr D Allan		

MO3302 Imperial Russia 1815 - 1917					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
	Academic year:	2016/7			
	Availability restrictions:				
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%  As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr F Nethercott		
Lecturer(s)/Tutor(s):	Dr F Nethercott		

### MO3319 Power without Responsibility'? The British Press and Politics (1850 - 1939) SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module will examine the role of the press in the developing political culture in Britain from the midnineteenth century to the coming of the Second World War. In this period the British press is widely believed to have exercised a degree of political influence not seen either before or since. The module will evaluate the formulation and construction of new political, social and cultural concepts during a period of rapid and continuous change. In part this was the result of fundamental changes transforming society and the economy such as the rise of assertive imperialism, the growth of universal franchise and literacy, the impact of the First World War, long term economic decline, and changing attitudes toward the people - the reading, voting and consuming public. These changes acted simultaneously on the media and political worlds and necessitated reciprocal adjustment by both. Other changes, such as innovations in communication technology, impacted primarily upon the media and were responsible for changes in political practice.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: Lecture and seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical	Examinations = 13%, Coursework = 27%	
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr C Kaul		
Lecturer(s)/Tutor(s):	Dr C Kaul		

MO3320 Imperialism and Nationalism: The British Empire in India 1857 - 1947					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: Weekly lecture and seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%  As used by St Andrews:  3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr C Kaul		
Lecturer(s)/Tutor(s):	Dr C Kaul		

### MO3328 Making Italians: Region, Nation and Empire in Italy from Unification to Fascism SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

The Risorgimento novelist, Massimo D'Azeglio's maxim that "having made Italy, it now remains to make the Italians" has become something of a truism for historians of modern Italy. Certainly, a perception of the need to build a nation and a national identity preoccupied Italian political and cultural elites but this insistence on a nation-=building enterprise which sought to drag allegiance of 'Italians' from their local campanile towards Rome seems to privilege a view of the rise of the nation-state as leading inexorably (and positively) to the dismantling and waning of local identities and loyalties. Historians have more recently focused their attention upon the often ambivalent intersection between regional, national and imperial identities, conceiving the connections between them as both potentially conflictual and concordant. This module will introduce students to the complex nature of nationalism and nation-building in late nineteenth and early twentieth century Italy, asking students to think conceptually about the interplay of the local, the national and the colonial and about the processes of constructing individual, national and imperial identities.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr K Ferris		
Lecturer(s)/Tutor(s):	Dr K Ferris		

MO3332 Central Europe: From Belle Epoque to Bloodlands					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

In the ninteenth century, Central Europe was the place where the multi-ethnic empires of the Habsburgs, Hohenzollerns, Ottomans and Romanovs brushed sides. The end of serfdom, the extension of suffrage, and the rise of the popularity of nationalism as the only legitimate ideology of statehood legitimation slowly undermined the region's political shape, before it was dramatically altered in the wake of the Great War. The belle epoque was over. The subsequent fitting of borders to linguistically defined nations in quest of nation-states led to population expulsions and exchanges. Later, in Central Europe the two totalitarianisms of communism and national socialism clashed, killing millions in warfare and genocide, and forcing tens of millions from their homes. World War II produced a radically different Central Europe as we know it nowadays. Knowing about the processes and changes is necessary to understand the present-day eastern half of the European Union.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, p	lus 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr T D Kamusella		
Lecturer(s)/Tutor(s):	Dr T D Kamusella		

### MO3333 Nationalism and Language in Central Europe

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.			
Pre-requisite(s):	Permission of the History Honours Adviser			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%			
	As used by St Andrews:			
	3-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr T D Kamusella			
Lecturer(s)/Tutor(s):	Dr T D Kamusella			

### MO3335 The Japanese Empire and its Aftermath (1873 - 1952)

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser				
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 15%, Coursework = 45%				
	As used by St Andrews:  Take-Home Examination = 40%, Coursework = 60%				
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr K Lawson				
Lecturer(s)/Tutor(s):	Dr K Lawson				

### MO3336 Mediterranean Colonialism: Colonisers and Colonised in France, Spain, Italy and North Africa 1890s - 1950s

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

This module looks comparatively at French, Italian and Spanish colonialism in North Africa (Algeria, Morocco, Tunisia, Libya) during the high point of European imperialism between the late nineteenth and mid twentieth centuries. With an emphasis on comparing experiences of colonialism under different kinds of European rule, and different ideas and practices of empire in the colonial power, it addresses topics such as ideology, culture, violence, settler colonialism, and North African responses to European rule. It will ask to what extent we can identify common features of colonialism across the Western Mediterranean world, and consider lasting effects of colonial rule on both Africans and Europeans.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Anti-requisite(s):	MO3381				
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr K Ferris				
Lecturer(s)/Tutor(s):	Dr K Ferris				

### MO3337 China's Revolutions (1850 - 1989)

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser				
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 15%, Coursework = 45%				
	As used by St Andrews: Take-Home Examination = 40%, Coursework = 60%				
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr K Lawson				
Lecturer(s)/Tutor(s):	Dr K Lawson				

### MO3338 Disease and the Environment (c. 1500 - 2000)

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	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Ī	Academic year:	2016/7				
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History. Optional for Sustainable Development.				
Pre-requisite(s):	Permission of the History Honours Adviser	Anti-requisite(s): MO3023			
Learning and teaching	Weekly contact: 1 x 2-hour semina	r, pl	us 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	<b>Guided independent study:</b> 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%				
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr J F M Clark				
Lecturer(s)/Tutor(s):	Dr J F M Clark				

### MO3346 Politics, Culture and Society in the French Revolution (1789-1815)

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable				

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.				
Pre-requisite(s):	Permission of the History Honours Adviser	Anti-requisite(s):		MO3221	
Learning and teaching	Weekly contact: 1 x 2-hour seminar	r, pl	us 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided indeper		ndent study: 267 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	3-hour Written Examination = 60%,	Cou	ursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%				
Module Co-ordinator:	Dr S Easterby-Smith				
Lecturer(s)/Tutor(s):	Dr S Easterby-Smith				

### MO3352 Migrant South Asia (c. 17th-20th centuries)

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.s	t-andrews.ac.uk/hi	story/infoug/ugtime	etable

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 transnational 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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hour		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr A Yechury		
Lecturer(s)/Tutor(s):	Dr A Yechury		

### MO3360 The Weaker Sex? Women and Scottish Society 1800 - 1970

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	See http://www.s	t-andrews.ac.uk/his	story/infoug/ugtime	etable

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.

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Programme module type:	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hour		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical	Examinations = 13%, Coursework = 27%	
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr M Petrie		
Lecturer(s)/Tutor(s):	Dr M Petrie		

### MO3365 Nationalism and Unionism in Modern Scotland SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module provides an examination of the phenomena of nationalism and unionism in modern Scottish history. It will explore the nature of the Union-state created in 1707 and the varieties of unionist ideology which sustained it, but it will also look at the emergence of a nationalist response in Scotland, which also took various forms ranging from Home Rule sentiment and reformist imperialism to the desire for total independence or 'independence in Europe'. A particular feature of the module will be the way it integrates the micro-politics of Fife and St Andrews in particular (including the careers of Thomas Chalmers and Douglas Young; by-elections in Fife; and the role of St Andrews in the rise of Thatcherism) into broader themes in the history of Scotland. Other issues to be tackled will include republicanism and the monarchy, religious tensions, the Constitution, and the relationships of Scotland with both England and Ireland.

Programme module type:	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Anti-requisite(s):	MO3761		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%		
	As used by St Andrews:  3-hour Written Examination = 60%, Practical Examination = 10%, Coursework = 30%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr M Petrie		
Lecturer(s)/Tutor(s):	Dr M Petrie		

## MO3406 The Soviet Union SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

The emergence and development of the Soviet Union is traced from the Bolshevik Revolution of October 1917, via the period of Stalin's dictatorship and the leaderships of Khrushchev and Brezhnev, up to the end of the Gorbachev era which culminated in the dissolution of the Union in 1991. The module studies interlinked political, ideological, social, economic and cultural themes. The role of the Soviet Union on the international stage is also examined.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hou		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr F Nethercott		

## MO3419 The French 'Civil Wars' of the Twentieth Century SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module explores the notion that twentieth-century French history can be seen in terms of 'Franco-French wars', between opposing ideologies, social classes, and conceptions of French identity. Beginning with an introduction to the most important issues which have divided the French since 1789, the module examines episodes such as the Second World War occupation, the difficult break-up of the French empire, and the May 1968 'revolution', focusing on the central themes of unity and division. The module concludes by looking at the effect that the legacies and memories of conflict and division have had on contemporary France.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.  Scheduled learning: 33 hours  Guided independent study: 267 hour		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr N Papadogiannis		
Lecturer(s)/Tutor(s):	Dr N Papadogiannis		

MO3421 Making People's Music: Folk Music Revival and Society in the United States (1900 - 1970)								
	SCOTCAT Credits:	credits: 30 SCQF Level 9 Semester: 2						
	Academic year:	2016/7						
	Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable							

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 27%, Coursework = 13%		
	As used by St Andrews:  3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr G A M Mitchell		
Lecturer(s)/Tutor(s):	Dr G A M Mitchell		

### MO3422 The United States in Depression and War (1929 - 1945)

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.s	t-andrews.ac.uk/hi	story/infoug/ugtim	etable

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.  Scheduled learning: 33 hours  Guided independent study: 267 hour		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr G A M Mitchell		
Lecturer(s)/Tutor(s):	Dr G A M Mitchell		

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

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.s	t-andrews.ac.uk/hi	story/infoug/ugtim	etable

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.

Programme module type:	Optional for History, Modern History and B.A. (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 26		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr K Ferris		
Lecturer(s)/Tutor(s):	Dr K Ferris		

### MO3424 De-colonising Asia (c. 1914 - 1975)

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

The twentieth century for Asia has been marked by a transition from colonial rule to post-colonial nationstates. This module will take a closer look at the growth of nationalism and the processes of decolonisation in Asia within a broad comparative frame. It will examine the different colonial experiences and how they shaped the process of decolonisation. It will explore the connections and ties between now independent and separate nation-states. Ultimately, it will ask if it is possible to speak of a post-colonial Asian identity in the twentieth century.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.	
Pre-requisite(s):	Permission of the History Honours Adviser	
Learning and teaching		
methods and delivery:		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%	
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%	
Module Co-ordinator:	Dr A Yechury	
Lecturer(s)/Tutor(s):	Dr A Yechury, Dr K Lawson	

### MO3502 War and Welfare: Britain 1939 - 1951

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

This module covers the period from the outbreak of war in 1939 to the end of the Attlee Governments in 1951. The emphasis will be on the social, cultural, economic and political impact of the war on Britain. It will examine whether wartime experiences led to consensus in favour of a comprehensive welfare state, and how the social, economic and political consequences of the war determined the shape of the welfare state which Labour brought into being after 1945.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser  Anti-requisite(s):		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews:		
	3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr J J Nott		
Lecturer(s)/Tutor(s):	Dr J J Nott	Dr J J Nott	

### **MO3508 America and Vietnam**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof G De Groot		
Lecturer(s)/Tutor(s):	Prof G De Groot		

### MO3513 Heavenly Decade: The 1960s

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SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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, Parish, 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.

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Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Anti-requisite(s):	MO4952		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.  Scheduled learning: 33 hours  Guided independent study: 267 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews:  3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof G De Groot		
Lecturer(s)/Tutor(s):	Prof G De Groot		

## MO3516 Popular Culture, Nation and Society: Leisure in Britain 1880 - 1960 SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: See http://www.st-andrews.ac.uk/history/infoug/ugtimetable

This module will explore the extraordinary growth of popular culture in Britain, c 1880-1960, from Victorian music hall to 'Teddy Boys'. It will study the key subjects of music, cinema, radio, sport and popular literature. Popular culture in Britain has never developed in a vacuum, therefore it will be examined in a broader historical context. Through selected case studies the module will trace the historical development of the agencies, institutions and audiences associated with the production and consumption of popular culture. It will analyse this expansion from before the First World War, through to the Second World War and beyond, ending with the major developments of the early Post War years.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 13%, Coursework = 27%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr J J Nott		
Lecturer(s)/Tutor(s):	Dr J J Nott		

MO3520 History, Memory and Identity in Postwar Western Europe (1945 - 2005)					
	SCOTCAT Credits:	30 SCQF Level 9 Semester: 1			
	Academic year:	2016/7			
	Planned timetable:	See http://www.st-andrews.ac.uk/history/infoug/ugtimetable			

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Pre-requisite(s):	Permission of the History Honours Adviser		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, p	lus 1 office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr N Papadogiannis		
Lecturer(s)/Tutor(s):	Dr N Papadogiannis		

MO4805	O4805 The Scottish Enlightenment					
	SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year	
	Academic year:	2016/7				
	Availability restrictions:	Available only to s	tudents in the seco	nd year of the Hon	ours Programme.	
	Planned timetable:	9.30 am - 12.30 pi	m Wed			
	achievement associated with Black and Sir Walter Scott. T	Scottish Enlightenment, an extraordinary phase of cultural and intellectual names like David Hume, Adam Smith, William Robertson, Allan Ramsay, Joseph The class will work with eighteenth-century published works and other original et the philosophical, historical, scientific and literary activities of the period.				
	Programme module type:	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.				
	Learning and teaching	Weekly contact: 1 x 3-hour meeting, plus 1 office hour.				
	methods and delivery:	Scheduled learning: 88 hours Guided independent study: 512 h			ident study: 512 hours	
	Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%				
		As used by St And	lrews:			
		2 x 3-hour Written Examinations = 60%, Coursework = 40%				
	Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%				
	Module Co-ordinator:	Dr D Allan				
	Lecturer(s)/Tutor(s):	Dr D Allan				

MO4807 The Marian Moment: Politics and Ideology in Mary Stewart's Britain 1542 - 1587						
	SCOTCAT Credits:	60 SCQF Level 10 Semester: Whole Year				
	Academic year:	2016/7 Available only to students in the second year of the Honours Programme.				
	Availability restrictions:					
	Planned timetable:	9.30 am - 12.30 pm Wed				

The life of Mary Stewart (1542-1587) is among the best known and most highly mythologised of all British monarchs. Queen of Scots more or less from birth, she also possessed a strong claim to the throne of England and it was as much her dynastic rights as her personal charms that led to the series of marital adventures that have so preoccupied her biographers. Yet while her career needs to be firmly situated in the context of sixteenth-century dynastic politics and diplomacy, it is important also to recognise that her life and reign generated a range of ideological debates that proved critical in crystallising and developing early modern thinking on such issues as the role of women in government, the rights of the people to resist tyranny, religious confessionalisation, and the meaning of Britain. Using a range of contemporary record and literary sources, this module uses Mary's life as a focal point for exploring these ideological issues as they developed in England as well as Scotland in the years from the 1540s to the 1508s.

Programme module type:	Optional for History, Modern History, Scottish History and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 3-hour meeting, p	lus 1 office hour.	
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof R Mason		
Lecturer(s)/Tutor(s):	Prof R Mason		

# MO4850 Britain and Iran in the Modern Era SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the Second Year of the Honours Programme. Planned timetable: Wed am

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.

Programme module type:	Optional for History, Middle East Studies, Modern History and BA (Intl Hons) History.		
Anti-requisite(s):	MO4957		
Learning and teaching	Weekly contact: 1 x 3-hour seminar, p	lus 1 office hour.	
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof A M Ansari		
Lecturer(s)/Tutor(s):	Prof A M Ansari		

MO4910 'The German Hercules' - Martin Luther and Germany, 1517 - 2000					
	SCOTCAT Credits:	60 SCQF Level 10 Semester: Whole Year			
	Academic year:	2016/7			
	Planned timetable:	Wed am.			

Martin Luther was the dominant figure of the European Reformation. His ideas brought about the most radical break with the medieval world. Yet he had a particular significance for Germans, who saw him variously as a leader, a prophet, a symbol of a mythic unity, and as the arch-heretic. This module will explore Luthers ideas and the development of the German Reformation in its intellectual and historical contexts, as well as the different ways in which the reformers legacy has been interpreted by Germans from his own day to our age. The course will examine Luthers place in the German identities fostered in Bismarckian Germany, under National Socialism, and in the former German Democratic Republic.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History		
Learning and teaching	Weekly contact: 1 x 2-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%		
	As used by St Andrews:  2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr B M Heal		
Lecturer(s)/Tutor(s):	Dr B M Heal		

## MO4912 French Absolutism: Richelieu to Louis XIV SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the Second Year of the Honours Programme. Planned timetable: Wed am

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 2.5-hour seminar,	plus 1 office hour.	
methods and delivery:	Scheduled learning: 77 hours	Guided independent study: 523 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Prof G Rowlands		
Lecturer(s)/Tutor(s):	Prof G Rowlands		

MO4938 Progress and Reform: The United States (1880 - 1930)						
	SCOTCAT Credits:	60 SCQF Level 10 Semester: Whole Year				
	Academic year:	2016/7				
	Availability restrictions:	Available only to students in the second year of the Honours Programme.				
	Planned timetable:	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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.			
Learning and teaching	Weekly contact: 1 x 3-hour semin	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%			
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%			
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr G A M Mitchell			
Lecturer(s)/Tutor(s):	Dr G A M Mitchell			

## MO4939 Civil War and Dictatorship in Spain, 1936 - 1959 SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 10.00 am - 1.00 pm Wed

The Spanish Civil War was not only a battle between 'two Spains', between two versions of what Spaniards thought their country should be, but also cast as an ideological showdown internationally; democracy versus dictatorship, socialism versus fascism. The module focuses on the political, social, cultural and economic history of the Civil War and Francoist dictatorship, tracing developments from the end of the Second Spanish Republic, through the establishment of the 'New Estate' until the close of what is commonly held to be the (more)\_ fascist phase of Franco's regime, with the accession to political power of the 'technocrats' and their stabilisation plan in 1959. Engaging directly with political tracts and speeches, newsreels, visual propaganda, literature, diaries and memoirs of the time, the module explores the Civil War and Francoist dictatorship as they were imagined, practiced and experienced.

Programme module type:	Optional for History, Modern History		
Learning and teaching	Weekly contact: 1 x 3-hour seminar.		
methods and delivery:	ethods and delivery: Scheduled learning: 88 hours Guided independent study:		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%		
	As used by St Andrews:		
	2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr K Ferris		
Lecturer(s)/Tutor(s):	Dr K Ferris		

MO4949 Debating Indian Futures: From Empire to Republic (1917 - 1950)							
	SCOTCAT Credits:	60 SCQF Level 10 Semester: Whole Year					
	Academic year:	2016/7					
	Availability restrictions:	Available only to students in the Second Year of the Honours Programme.					
	Planned timetable:	Wed am					

India was central to the British imperial system and represented the first seminal case in which a subject peoples raised and pressed the case for significant self-government. This module considers the nature of this challenge and the political and popular response it evoked in Britain in a series of constitutional reforms, beginning with the Montagu-Chelmsford Declaration of 1917, to the granting of Independence and Partition in 1947 and culminating in a study of the formative years of the newly independent India, 1947-1950. Throughout, the focus will be upon the process by which those reforms were arrived at and the competing perspectives on these problems. As such it will provide an in-depth analysis of British attitudes to 'the problem of empire' in the climactic years after the end of the First World War and the battle of ideas and interests which constituted the debate over India's - and by implication, the Empire's future.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 7%, Coursework = 33%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr C Kaul		
Lecturer(s)/Tutor(s):	Dr C Kaul		

O4952 The Kennedy Years						
r						
Available only to students in the Second Year of the Honours Programme.  Wed am						
Optional for History, Modern History and BA (Intl Hons) History.  MO3513						
512 hours						
As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%						
2 x 3-hour Written Examinations = 60%, Coursework = 40%  New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%						
				Prof G De Groot		
Wed am  a in the 1960s, through the careers of John, Robert and Edward Kennedy, is e political landscape which brought John Kennedy to the White House in Optional for History, Modern History and BA (Intl Hons) History.  MO3513  Weekly contact: 1 x 3-hour seminar, plus 1 office hour.  Scheduled learning: 88 hours  Guided independent study: 512 h  As defined by QAA:  Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40  As used by St Andrews:  2 x 3-hour Written Examinations = 60%, Coursework = 40%  New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000-5,000-word essay = 100%						

### MO4962 France and Africa in the Twentieth Century: Colonialism, Anti-colonialism, Post-colonialism

60	SCQF Level 10	Semester:	Whole Year
2016/7			
Available only to students in the second year of the Honours Programme.			
10.00 am - 1.00 pm Wed			
	2016/7 Available only to s	2016/7 Available only to students in the second	2016/7 Available only to students in the second year of the Hon

In 1918, French imperial power in Africa reached its zenith. Yet the next fifty years were characterised by contradiction, decline, and conflict, as the certainties of the 'age of empire' were challenged. This module examines French imperial rule in Africa, and its legacies and afterlives, from the beginning of the twentieth century to the contemporary post-colonial era. Key topics that will be explored include the ideas that underpinned French imperialism; the effects of imperialism on colonised societies; challenges to imperial rule was challenged and undermined; the complex relationship between French republican ideals and imperialism; movements of people and ideas from Africa to metropolitan France; and the persistent and important legacies of empire in the post-colonial era.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Learning and teaching	•		
methods and delivery: Scheduled learning: 88 hours Guided independe		Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr S Tyre		
Lecturer(s)/Tutor(s):	Dr S Tyre		

# MO4965 Ethnic Cleansing and Genocide in Twentieth-Century Europe SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: Wed am

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Learning and teaching	•		
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%		
	As used by St Andrews:		
	2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr T D Kamusella		
Lecturer(s)/Tutor(s):	Dr T D Kamusella		

### History - Honours Level - 2016/7 - August 2016

# MO4967 Elizabethan England: Politics, Religion, and Personalities (1558 - 1603) SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the Second Year of the Honours Programme. Planned timetable: Wed am

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.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Anti-requisite(s):	MO4916		
Learning and teaching	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.  Scheduled learning: 88 hours  Guided independent study: 512 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 5%, Coursework = 65%		
	As used by St Andrews:  3-hour Written Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr J Rose		
Lecturer(s)/Tutor(s):	Dr J Rose		

# MO4968 Curiosity, Empire and Science in Eighteenth-Century France SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: Wed am

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.

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Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.		
Learning and teaching	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.		
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2 x 3-hour Written Examinations = 60%, Coursework = 40%		
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%		
Module Co-ordinator:	Dr S Easterby-Smith		
Lecturer(s)/Tutor(s):	Dr S Easterby-Smith		

MO4973 Twentieth-Century Germany: A Sense of Place								
	SCOTCAT Credits: 60 SCQF Level 10 Semester: Whole Year							
	Academic year:	2016/7						
	Availability restrictions:	Available only to students on the second year of the Honours Programme.						
	Planned timetable:	9.30 am - 12.30 pm Wed						

This module explores the history of twentieth-century Germany from the perspective of place and space. Centred on the key concept of Heimat (homeland), it examines German identities from the turn of the century to the 1980s in East and West Germany. It investigates a variety of different places and spaces in both their material and symbolic dimension. The module allows students to engage with a range of different primary sources, including films, maps, travel guidebooks and the built environment.

Programme module type:	Optional for History, Modern History and BA (Intl Hons) History.			
Learning and teaching	Weekly contact: 1 x 3-hour seminar, plus 1 office hour.			
methods and delivery:	Scheduled learning: 88 hours	Guided independent study: 512 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	As used by St Andrews:			
	2 x Take-home Examinations = 40%, Coursework = 60%			
Re-Assessment pattern:	New Coursework: 1 x source exercise (2,000 - 2,500 words) and 1 x 4,000- to 5,000-word essay = 100%			
Module Co-ordinator:	Dr R Bavaj			
Lecturer(s)/Tutor(s):	Dr R Bavaj			

### **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							
	SCOTCAT Credits: 30 SCQF Level 9 Semester: 1						
	Academic year:						
	Planned timetable:						

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr Smith	Dr Smith	
Lecturer(s)/Tutor(s):	Dr Smith		

Re-Assessment pattern:

Module Co-ordinator:

Lecturer(s)/Tutor(s):

Lecturer(s)/Tutor(s):

### **IR3006 International Regimes and Organisations SCOTCAT Credits:** SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 9.00 am 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. Programme module type: Optional for International Relations and BA (Intl Hons) International Relations Pre-requisite(s): IR2005 and IR2006 Learning and teaching Weekly contact: 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 methods and delivery: weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester. Scheduled learning: 46 hours Guided independent study: 254 hours Assessment pattern: As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50% As used by St Andrews:

3-hour Written Examination = 50%, Coursework = 50%

3-hour Written Examination = 100%

Dr C Buranelli

Dr C Buranelli

CSTPV staff

IR3008 International Terroris	98 International Terrorism				
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7	2016/7			
Planned timetable:	12.00 noon Thu	12.00 noon Thu			
relationships to other for causes of rise and dec terrorism; terrorism ar international co-operation	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.				
Programme module type	: Optional for Inter	Optional for International Relations and BA (Intl Hons) International Relations			
Pre-requisite(s):	IR2005 and IR200	IR2005 and IR2006			
Learning and teaching methods and delivery	weeks), 2 consult	Weekly contact: 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.			
	Scheduled learni	ng: 46 hours	Guided indepen	ndent study: 254 hours	
Assessment pattern:		As defined by QAA:  Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	-	As used by St Andrews:  3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Ex	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr P Lehr	Dr P Lehr			

## IR3021 Case Studies in Conflict Analysis SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: 12.00 noon Mon

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr T Shepperd		
Lecturer(s)/Tutor(s):	Dr T Shepperd		

### IR3022 International Relations and International Law SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 11.00 am Wed

This module investigates international law as a paradigm for critically analysing international relations. It starts from an assumption that international politics is so intertwined with international law concepts and practices that students and practitioners in international relations cannot operate without basic familiarity with international law. International law is an arena for debates about core values of the international system and a mechanism for the balancing of competing values that underpin it. At the same time international law is constrained by international political realities. Throughout the module we will contend not just with the fundamental assumptions about 'international order', but also question in what ways this order is developing. We will strive to better understand the complex relationship between law and politics in the international arena. The conscientious student pursuing this module should (a) be able to see international law as a useful paradigm for the understanding of international relations and be able to contextualize it within international relations theories; (b) be able to identify when a dispute among international actors would benefit from a legal analysis and discern competing values underpinning it; (c) be able to critically evaluate legal arguments and understand how their development and application is constrained by international politics, and (d) have the capacity to apply and discuss international legal rules and concepts in relation to a number of substantive issue areas covered in this module.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consutlation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Peter		
Lecturer(s)/Tutor(s):	Dr M Peter		

## IR3023 US Foreign Policy: The Dilemmas of Empire SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: 12.00 noon 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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr D Miles		
Lecturer(s)/Tutor(s):	Dr D Miles		

IR3024 The Politics of Africa					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	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".

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof I Taylor		
Lecturer(s)/Tutor(s):	Prof I Taylor		

### **IR3025 International Security SCOTCAT Credits:** 30 SCQF Level 9 Semester: 2 **Academic year:** 2016/7 Planned timetable: To be arranged. 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. **Programme module type:** Optional for International Relations and BA (Intl Hons) International Relations Pre-requisite(s): IR2005 and IR2006 Learning and teaching Weekly contact: 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 methods and delivery: weeks), 2 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester. Scheduled learning: 46 hours **Guided independent study: 254 hours Assessment pattern:** As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50% As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50% 3-hour Written Examination = 100% **Re-Assessment pattern: Module Co-ordinator:** Dr L Middup Lecturer(s)/Tutor(s): Dr L Middup

IR3026 Diplomacy and Conflict Intervention					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	2.00 pm Thu			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof K M Fierke		
Lecturer(s)/Tutor(s):	Prof K M Fierke		

### IR3029 The Logic of Irregular Warfare SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7

11.00 am Mon

Planned timetable:

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr L Middup		
Lecturer(s)/Tutor(s):	Dr L Middup		

IR3030 Human Rights in Theory and Practice					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	12.00 noon Tue			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr J P Hayden		
Lecturer(s)/Tutor(s):	Dr J P Hayden		

### **IR3032 Globalisation and its Disjunctures**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	10.00 am Thu			

Debates concerning globalisation have intensified since 9/11, the US-led intervention in Afghanistan and Iraq, the emergence of various Islamist groups that proclaim jihad, the proliferating security concerns around the world (particularly following the Madrid and London bombings), debates concerning the environment, and the rise of the new economic powers of China and India. Globalisation is a complex phenomenon that is defined in so many different ways that it is difficult to know what it means and to predict its potential utility. The literature on globalisation is diverse in terms of the specific approaches adopted and conclusions reached. There is no single theory of globalisation. Rather globalisation involves complex dialectical processes of homogenisation and differentiation, integration and fragmentation, and universalisation and particularlisation. The purpose of this module is to critically explore both the theory and practice of globalisation and its disjunctures in the contemporary world.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr G S Sanghera		
Lecturer(s)/Tutor(s):	Dr G S Sanghera		

### **IR3035 Peace Processes and Violence**

S	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
P	Academic year:	2016/7			
P	Planned timetable:	To be arranged.			

This module will examine issues of violence that confront peacemaking processes I contemporary civil wars. It begins by examining the concepts of peace and peace processes, before considering the role of violence, and violent actors, in facilitating or thwarting a negotiated agreement between combatants. Practical and ethical issues abound: is there a right time to talk to 'terrorists'; can we overcome a deeply embedded culture of violence; are all spoilers necessarily bad? The module will be comparative and draw on contemporary examples.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching	Weekly contact: 1 lecture and 1 tutorial.		
methods and delivery:	Scheduled learning: 46 hours	Guided independent study: 254 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr R Jalkebro		
Lecturer(s)/Tutor(s):	Dr R Jalkebro		

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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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr V Paipais		
Lecturer(s)/Tutor(s):	Dr V Paipais		

IR3042 Representations of Violent Conflict: Research Seminar					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	11.00 am - 1.00 pm Wed or Thu			

The module interrogates the nature of violence and the representational dilemmas this creates for the researcher and for conflict analysis more generally. It explores competing and cross-disciplinary theoretical and methodological approaches to study violent conflict, and then applies these to specific case studies. Problems associated with researching conflict and violence will also be covered, including ethical considerations, challenges of field research, and problems of cross-cultural communication. Students will produce an original case study focused on a conflict site or issue of their choice. The module provides instruction on research and writing skills, and trains students to construct theoretical and methodological research frameworks that will augment their preparation for the IR Honours Dissertation.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour seminar, and occasional film viewing and case study workshops.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr J McMullin		
Lecturer(s)/Tutor(s):	Dr J McMullin		

### IR3044 Pathways of European State Formation SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: 11.00 am - 12.30 Wed

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr J Murer		
Lecturer(s)/Tutor(s):	Dr J Murer		

### **IR3045 Violence in Deeply-Divided Societies**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	10.00 am Wed			

Bloodshed is what tends to keep divided societies in the headlines: yet the nature of this violence often remains under-examined as a political force in its own right. This module seeks to explain what drives processes of violence in deeply divided societies with particular emphasis on what happens at the grassroots and between communities. The module combines theory with in-depth consideration of four case studies from across Europe and the Middle East, taking a longer-term view of conflict in Northern Ireland, Yugoslavia, Israel/Palestine and Iraq.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching	Weekly contact: 1 lecture and 1 tutorial.  Scheduled learning: 46 hours  Guided independent study: 254 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr N Brooke		
Lecturer(s)/Tutor(s):	Dr N Brooke		

### **IR3046 Foreign Policy of Modern China**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	12.00 noon Mon			

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.

Programme module type:	Ontional for International Relations an	d BA (Intl Hons) International Relations	
	optional for international relations and BA (international relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C Ogden		
Lecturer(s)/Tutor(s):	Dr C Ogden		

### **IR3048 Peacekeeping and Humanitarian Intervention**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	10.00 am - 12.00 noon Tue or 1.00 pm - 3.00 pm Tue			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr N MacQueen		
Lecturer(s)/Tutor(s):	Dr N MacQueen		

### IR3049 International History and International Relations SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 11.00 am Mon

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof A J Williams		
Lecturer(s)/Tutor(s):	Prof A J Williams		

IR3050 State, Power, Crime					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	10.00 am Tue			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr H Cameron		
Lecturer(s)/Tutor(s):	Dr H Cameron		

### IR3054 Mapping the Boundaries of Emerging and Evolving Securities SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 12.00 noon Mon

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 how is security 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?

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr F Donnelly		
Lecturer(s)/Tutor(s):	Dr F Donnelly		

IR3055 International Relations and the Internet					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	2.00 pm Thu			

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.

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Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations			
Pre-requisite(s):	IR2005 and IR2006			
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 46 hours Guided independent study: 254 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Mr G Ramsay			
Lecturer(s)/Tutor(s):	Mr G Ramsay	Mr G Ramsay		

### IR3056 Political Leadership: Theories and History SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: 1.00 pm Tue

This module investigates the meaning, role, significance, value or ethics of political leadership in the western tradition. Its overall objective is to enable students to analyse and evaluate descriptive, historical, and normative arguments on the significance and function of political leaders in contemporary politics.

The module examines competing theories of leadership in their historical and intellectual contexts; it analyses' leadership' in relation to other political concepts such as sovereignty, democracy, rule of law, and patriarchy. The approach is theoretical and philosophical; examples of historical leaders (e.g. Mandela, Thatcher) will be used to highlight strengths and weaknesses of competing theories of leadership, and to emphasise their ideological assumptions and implications.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr G Slomp		
Lecturer(s)/Tutor(s):	Dr G Slomp		

### IR3057 Armaments and International Relations SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 10.00 am Fri

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.

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M DeVore		
Lecturer(s)/Tutor(s):	Dr M DeVore		

### IR3058 Armed Forces, Societies and Governments: An International Perspective on Civil-Military Relations

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	10.00 am Fri			

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 civilmilitary relations.

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.)

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M DeVore		
Lecturer(s)/Tutor(s):	Dr M DeVore		

### **IR3060 Rebellion and Revolution**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	1.00 pm Thu			

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 will analyse the causes of rebellion, the dynamics of insurgency and counterinsurgency, and the outcomes of resistance.

Programme module type:	Ontional for International Relations an	d RA (Intl Hons) International Polations			
Programme module type.	Optional for International Relations and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006				
Learning and teaching methods and delivery:	Weekly contact: 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.				
	Scheduled learning: 46 hours Guided independent study: 254 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr K Harkness				
Lecturer(s)/Tutor(s):	Dr K Harkness				

### **IR3062 The United Nations since 1945**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	10.00 am - 12.00 noon Tue or 1.00 pm - 3.00 pm Tue				

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006				
Learning and teaching methods and delivery:	<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.				
	Scheduled learning: 44 hours Guided independent study: 256 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%			
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr N MacQueen				
Lecturer(s)/Tutor(s):	Dr N MacQueen				

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2		
Academic year:	2016/7	2016/7				
Planned timetable:	To be arran	To be arranged.				
The module provides an overview of organised crime and corruption and its effects on the political economic, and social development of countries around the world. It will discuss the increasingly globa nature of transnational organised crime, its growing portfolio of illicit activities and its impact on regiona and international security. The analysis will also address the complexities of criminal groups in different parts of the world and the policies to fight them.						

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations			
Pre-requisite(s):	IR2005 and IR2006			
Learning and teaching methods and delivery:	Weekly contact: 1 x 2-hour seminar (x 11 weeks), 1-hour lecture (x 11 weeks) 1 consultation hours with Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	Scheduled learning: 47 hours Guided independent study: 253 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Co	oursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr R Jalkebro			
Lecturer(s)/Tutor(s):	Dr R Jalkebro			

- 1	1D2064	Cuitian	<b>Terrorism</b>	Ctudian
	IRKUNA	( ritical	Lerrorism	STIINIES

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	9.00 am - 11.00 am Mon or Tue				

This module will introduce students to the main concerns raised by Critical Terrorism Studies. Working within the Critical Security Studies tradition, Critical Terrorism Studies argue that mainstream Terrorism Studies has not been open to new challenges and perspectives. As such, Terrorism Studies problematically reifies particular sites and structures of power. Because of this perspective, Critical Terrorism Studies poses several challenges to Terrorism Studies about how terrorism is defined and limited to particular actors. Thus, this module will explore these challenges, which include state terrorism, the discourse of radicalization, and the role of emotion before turning to the intended outcome of Critical Terrorism Studies scholarship: emancipatory practices.

Programme module type:	Optional for International Relations			
Pre-requisite(s):	IR2005 and IR2006			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1-hour lecture (x 11 weeks), 1-hour tutorial (x 10 weeks), 2 office consultative hours (x 12 weeks)			
	Scheduled learning: 45 hours Guided independent study: 255 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 40%, Practical Examinations = 25%, Coursework = 35%			
	As used by St Andrews:			
	3-hour Written Examination = 40%, Co	ursework = 60%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr C Gentry			
Lecturer(s)/Tutor(s):	Dr C Gentry			

IR3065 Refugees and International Relations							
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
	Academic year:	2016/7					
	Planned timetable:	1.00 pm Mon					

While discourses of globalisation posit a "post-national" or "borderless" world and the withering of the nation-state, this is arguably not a condition that the 1 in every 140 people globally who are displaced would recognise. Refugees and other forced migrants raise important questions for dominant understandings of the state, security, sovereignty, citizenship, humanitarianism, intervention, and international regimes, among many others, in International Relations. This module introduces some of the complex issues surrounding refugees and forced migration in global politics today. While oriented toward the role that refugees and the refugee problem play in international relations, the module is inter-disciplinary in nature, drawing on historical, legal, sociological, anthropological, and philosophical works and debates. The primary goal of the module is for students to gain critical awareness of the role and nature of the refugee problem — as a legal, political and moral problem — in global politics. Students will gain an understanding of the history of the refugee problem, the practical functions and workings of the UN refugee system, the asylum process in the EU, and of emerging issues in refugee research.

Programme module type:	Optional for International Relations			
Pre-requisite(s):	IR2005 and IR2006			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1-hour lecture (x 11 weeks), 1-hour tutorial (x 11 weeks) 2 office consultative hours (x 12 weeks)			
	Scheduled learning: 46 hours Guided independent study: 254 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr N Saunders			
Lecturer(s)/Tutor(s):	Dr N Saunders			

IR3066 Emotional Encounters: Diplomacy, Power and Persuasion in World Politics							
	SCOTCAT Credits: 30 SCQF Level 9 Semester: 1						
Academic year: 2016/7  Planned timetable: 3.00 pm Thu							

As the world becomes increasingly inter-connected new concerns and issues crowd the international agenda and more and more actors can be seen to participate in international affairs. The management of internal and external affairs is becoming more complex, and with the technological revolution an increased focus on language, performance and 'reaching out' to different audiences. This module, in recognition of these trends, seeks to draw attention to and investigate these processes that could be said to be changing the face of diplomacy as we know it. It will explore a range of agents and tools associated with the practice of diplomacy, and draw on a variety of examples to illustrate the different themes and topics covered. One of the key premises of this module will be to highlight and consider the potential enabling as well as constraining effects of emotional dynamics in diplomatic interactions. By focusing on the changing face of diplomacy and the role of emotions in international relations it aims to expose students to two of the most exciting and rapidly expanding fields of enquiry in the discipline of IR.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR1005, IR1006, IR2005, IR2006		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 11 weeks), 1-hour tutorial (x 10 weeks), 2 office hours		
	Scheduled learning: 45 hours Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr T Shepperd		
Lecturer(s)/Tutor(s):	Dr T Shepperd		

### IR3067 The International Criminal Court in World Politics SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 4.00 pm Tue

This module provides a detailed examination of the International Criminal Court, the first permanent global court charged with investigating and prosecuting the most serious international crimes. The ICC is both a legal institution composed of lawyers and judges and a political actor aiming to influence the behaviour of governments, militaries, and rebel groups. This complexity raises a number of practical challenges facing the Court. Who should face accountability for grave crimes? How can the pursuit of justice be reconciled with demands for peace and reconciliation, and when should one take precedence? And is criminal punishment even the most appropriate means of addressing grave violations of human rights? Through this module, students will gain a greater understanding of key features of international criminal law, the structure and status of the ICC, and will be challenged to apply their knowledge to contemporary problems facing the international criminal justice regime.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2006		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 11 weeks), 1-hour tutorial (x 9 weeks) 2 consultation hours with Coordinator (x 12 weeks)		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr A Bower		
Lecturer(s)/Tutor(s):	Dr A Bower		

IR3070 Armed Conflict in Postcolonial Africa					
	SCOTCAT Credits:	30 SCQF Level 9 Semester: 1			
	Academic year:	2016/7			
	Planned timetable:	To be arranged.			

How can we categorise different types and dimensions of armed conflicts in postcolonial Africa? What are their underlying and proximate causes? And what can be done to resolve them and achieve lasting peace? These are the overarching questions that guide the module. Following a broad historical overview, it addresses the relative paucity of interstate and secessionist conflict while highlighting the abundance of external involvement. Then, the module turns to problems of governance, the motives of rebels, and the role that ethnicity and religion play in the outbreak and continuation of conflicts. The module concludes by investigating the promises and pitfalls of both peacemaking and peacekeeping. Each tutorial provides students with the opportunity to apply general insights from the week's lecture to a specic case, including some of Africa's most recent conflicts.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR1005, IR1006, IR2005, IR2006		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 11 weeks), 1-hour tutorial (x 10 weeks) 2 consultation hours with Coordinator (x 12 weeks)		
	Scheduled learning: 45 hours Guided independent study: 255 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr H Tamm		
Lecturer(s)/Tutor(s):	Dr H Tamm		

### | IR3111 Asian Security | SCOTCAT Credits: | 30 | SCQF Level 9 | Semester:

Academic year: 2016/7

Planned timetable: 4.00 pm Tue

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.

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Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr P Lehr		
Lecturer(s)/Tutor(s):	Dr P Lehr		

### **IR3113 Gender and Generation**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	3.00 pm Tue			

The incorporation of issues of gender into the prevailing international relations discourse changes the way in which international relations is thought about, and theorised. This module will examine the meaning of such change, and will also argue that, in a similar way, incorporating children into the established discourse may mean that traditional themes and constructs such as states, sovereignty, political identity, agency, power, representation, etc. are transformed. This module includes an examination of such issues as the use of child soldiers; women and warfare; childrens economic role; and political theory as it relates to the family.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching	Weekly contact: 1 lecture and 1 tutorial.  Scheduled learning: 46 hours  Guided independent study: 254 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof A Watson		
Lecturer(s)/Tutor(s):	Prof A Watson		

### IR3300 Conflict in the Middle East SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: 10.00 am Mon

This module examines conflict in the modern Middle East looking at the causes, development and consequences of different types of conflict in the region including interstate, civil war, ethnic, religious and terrorism. It examines state formation and the development of competing ideologies. The legacies of these processes are explored through case studies e.g. the Arab-Israeli conflict, Lebanon and Iraq. The rise of political Islam in the region impacts on state-society relations and both its militant and non-violent manifestations will be examined. The region has been characterised by authoritarian regimes and this legacy and the impact of the 2011 Uprisings will be explored including conflicts in Syria, Bahrain and Yemen. Developments within Shia Islam will be covered in relation to the Islamic Republic of Iran and its impact on regional security. The question of external intervention in the Middle East is also addressed in relation to Iraq post-2003 and the 2011 Arab Uprisings.

Programme module type:	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture (x 11 weeks), 1 x 1-hour tutorial (x 10 weeks), The class will be divided into multiple tutorial groups to allow small group discussion.		
	Scheduled learning: 45 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr F McCallum		
Lecturer(s)/Tutor(s):	Dr F McCallum		

### **IR3301 Politics and State Formation in the Middle East**

onties and state i ornidation in the initialic East				
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	2.00 pm Tue			

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.

Programme module type:	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof R Hinnebusch		
Lecturer(s)/Tutor(s):	Prof R Hinnebusch		

### IR3302 Democracy and Revolution in North Africa

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	11.00 am Mon			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 45%, Practical Examinations = 0%, Coursework = 55%		
	As used by St Andrews:		
	3-hour Written Examination = 45%, Coursework = 55%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr F Volpi		
Lecturer(s)/Tutor(s):	Dr F Volpi		

SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year			
Academic year:	2016/7 & 2017/8						
Planned timetable:		n Mon (Weeks 1,3,5	5,7,9,11)				
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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)							
Programme module type:	<ul> <li>Compulsory for Single Honours International Relations.</li> <li>Optional for Joint Honours International Relations, International Relations and Modern Languages (two languages), Middle East Studies.</li> </ul>						
Pre-requisite(s):	IR2005 and IR200	6	Anti-requisite(s):	Any other Dissertation module			
Learning and teaching methods and delivery:							
	Scheduled learning	ng: 68 hours	Guided indepen	dent study: 532 hour			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%						
	As used by St Andrews: Literature Review (semester 1) = 15%, Dissertation (semester 2) = 85%						
	No Re-Assessment possible						
Re-Assessment pattern:	No Re-Assessmen	t possible					

101	1 Communication in International Relations								
	SCOTCAT Credits:	15	SCQF Level 10	Se	emester:	1			
	Academic year:	2016/7	2016/7						
	Planned timetable:	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.								
	Programme module type:	With permission, this is an optional module (taken with ID4002) for International Relations							
		Optional for Inter	national Relations	and	BA (Intl Hons) In	ternational Relations			
	Pre-requisite(s):	IR2005 and IR200	6	Co-ı	requisite(s):	ID4002			
-	Learning and teaching methods and delivery:	Weekly contact: I office/contact hou	•		ours of essay sup	pervision and 22			
		Scheduled learning	ig: 28 hours	(	Guided indepen	dent study: 122 hours			
	Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%							
		As used by St Andrews:							
		Coursework = 100%							
	Re-Assessment pattern:	3-hour Written Ex	amination = 100%	5					
Ī	Module Co-ordinator:	Dr F McCallum							
	Lecturer(s)/Tutor(s):	Dr F McCallum							

Global Public Policy							
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1			
Academic year:	2016/7						
Planned timetable:	To be arranged.						
This module examines the variety of issue-areas such variety of IR and related so mankind, to explain problem include climate change, the	as environment, no cial theories such a ns in constructing b	ew technologies, as functionalism, re pinding internation	and sustainable degime theory and	evelopment. It will use a the common-heritage of			
Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations						
Pre-requisite(s):	IR2005 and IR2006						
Learning and teaching methods and delivery:	Weekly contact: 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.						
	Scheduled learning	ng: 46 hours	Guided indep	endent study: 254 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%						
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%						
Re-Assessment pattern:	3-hour Written Ex	amination = 100%					
	Dr R Jalkebro						
Module Co-ordinator:	DI IN Jaikebio						

# IR4516 The International Relations of Sub-Saharan Africa SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 10.00 am Mon

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).

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006				
Learning and teaching methods and delivery:	Weekly contact: 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.				
	Scheduled learning: 46 hours Guided independent study: 254 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%			
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Prof I C Taylor				
Lecturer(s)/Tutor(s):	Prof I C Taylor				

4518 Ethics and the Use of Fo	B Ethics and the Use of Force							
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2				
Academic year:	2016/7							
Planned timetable:	2.00 pm Mon	2.00 pm Mon						
framed war and violence o	This module will examine the ethics of war and violence. It will explore various ethical traditions that have framed war and violence over the centuries, and will then explore some specific topics. The goal of the module is to provide students with tools for critically evaluating violence and war at the global level.							
Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations							
Pre-requisite(s):	Optional for International Relations and BA (Intl Hons) International Relations							
Learning and teaching	Weekly contact: 1	lecture and 1 tutor	rial.					
methods and delivery:	Scheduled learning	ng: 21 hours	Guided indepen	ndent study: 279 hours				
Assessment pattern:	As defined by QA	A:						
	Written Examinat	ions = 50%, Practica	Examinations = 09	%, Coursework = 50%				
	As used by St Andrews:  3-hour Written Examination = 50%, Coursework = 50%							
Re-Assessment pattern:	3-hour Written Examination = 100%							
Module Co-ordinator:	TBC			_				
Lecturer(s)/Tutor(s):	TBC							

### **IR4523 The Aftermath of the Wars: Liberal Dilemmas**

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	10.00 am Tue				

This module will examine the aftermath of wars since about 1900 and ask what options have been open to policy makers in smoothing the transition to peace. To do so it will look at a series of such policy options in both historical depth and current reality. Most of these policy options start with an 'r': restitution, reparation, reconciliation, reconstruction, retribution etc. This module is organised around those 'r's. Each of these policy options has in itself a 'history' that is here explicitly linked to liberal thinking about war and hence to liberal views about how they should be ended.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006				
Learning and teaching	Weekly contact: 1 lecture and 1 tutorial.				
methods and delivery:	Scheduled learning: 46 hours Guided independent study: 254 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Prof A J Williams				
Lecturer(s)/Tutor(s):	Prof A J Williams				

### IR4530 Genocide

,	Genociae						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2		
	Academic year:	2016/7					
	Planned timetable:	3.00 pm Mon					

This module provides students with a conceptual and historical overview of genocide from a broad interdisciplinary perspective. Drawing upon contributions from political science, international relations, history, philosophy, sociology, psychology and literature, the module examines a range of empirical case studies along with some of the historical and philosophical debates they have sparked. Topics to be addressed include definitions of genocide; the evolving international law of genocide; themes of memory, responsibility and denial; and mechanisms of justice and reconciliation.

Programme module type:	Optional for International Relations and B.A. (Intl Hons) International Relations						
Pre-requisite(s):		Anti-requisite(s): IR3050					
Learning and teaching	Weekly contact: 1 lecture and 1 tut	Weekly contact: 1 lecture and 1 tutorial.					
methods and delivery:	Scheduled learning: 46 hours	Guided indepen		dent study: 254 hours			
Assessment pattern:	As defined by QAA:						
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%						
	As used by St Andrews:						
	3-hour Written Examination = 50%, Coursework = 50%						
Re-Assessment pattern:	3-hour Written Examination = 100%						
Module Co-ordinator:	Dr H Cameron						
Lecturer(s)/Tutor(s):	Dr H Cameron		·	·			

# IR4532 The Cultural Politics of Human Rights SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006				
Learning and teaching methods and delivery:	<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.				
	Scheduled learning: 46 hours Guided independent study: 254 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr G S Sanghera				
Lecturer(s)/Tutor(s):	Dr G S Sanghera				

## IR4535 Theories of Friendship, Solidarity and Peace SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 2.00 pm Thu

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006				
Learning and teaching methods and delivery:	Weekly contact: 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.				
	Scheduled learning: 46 hours Guided independent study: 254 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr G Slomp				
Lecturer(s)/Tutor(s):	Dr G Slomp				

### IR4536 Warmongers and Peacemakers: Religious Actors and Conflict

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	10.00 am Mon			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr F McCallum		
Lecturer(s)/Tutor(s):	Dr F McCallum		

### IR4538 Identities, Belonging and Others SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 12.00 noon - 1.30 pm Tue

The module explores the processes of collective identity formation and is 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.

Programme module type:	Optional for International Relations an	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006			
Learning and teaching methods and delivery:	<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.			
	Scheduled learning: 46 hours Guided independent study: 254 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr J Murer			
Lecturer(s)/Tutor(s):	Dr J Murer			

### **IR4540 The Changing Character of War**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	2.00 pm Mon			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr L Middup		
Lecturer(s)/Tutor(s):	Dr L Middup		

# IR4543 Activism and Resistance SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 2.00 pm Thu

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours	Guided independent study: 254 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof A Watson		
Lecturer(s)/Tutor(s):	Prof A Watson		

IR4544 Wars and Peace in the Caucasus							
	SCOTCAT Credits: 30 SCQF Level 10 Semester: 2						
	Academic year:	2016/7					
	Planned timetable:	11.00 am - 1.00 pı	m Tue				

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 46 hours	Guided independent study: 254 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Examination = 50%, Coursework = 50%,		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof R Fawn		
Lecturer(s)/Tutor(s):	Prof R Fawn		

### IR4545 Indian Foreign Policy SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 12.00 noon Mon

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 twenty-first century.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 46 hours	Guided independent study: 254 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%	
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C Ogden		
Lecturer(s)/Tutor(s):	Dr C Ogden		

IR4546 The Psychology of International Security							
	SCOTCAT Credits: 30 SCQF Level 10 Semester: 1						
	Academic year:	c year: 2016/7					
	Planned timetable:	11.00 am - 1.00 pı	11.00 am - 1.00 pm Wed or 11.00 am - 1.00 pm Thu				

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 20%, Practical Examinations = 0%, Coursework = 80%		
	As used by St Andrews:		
	3-hour Written Examination = 20%, Coursework = 80%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr R Beasley		
Lecturer(s)/Tutor(s):	Dr R Beasley	·	

# IR4548 Force and Statecraft SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 1.00 pm Thu

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.

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Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Co	ursework = 50%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr K Harkness		
Lecturer(s)/Tutor(s):	Dr K Harkness		

IR4551 Cosmopolitanism and Global Politics					
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	Academic year:	2016/7			
	Planned timetable: 1.00 pm - 3.00 pm Tue or 10.00 am - 12.00 noon Wed				

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006	IR2005 and IR2006	
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof P Hayden		
Lecturer(s)/Tutor(s):	Prof P Hayden	·	

### IR4552 The Politics of the Environment SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr A Brown		
Lecturer(s)/Tutor(s):	Dr A Brown		

### IR4553 Europe, America and the Transatlantic

Planned timetable:

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	1.00 pm Tue			

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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr F Donnelly		
Lecturer(s)/Tutor(s):	Dr F Donnelly		

# IR4555 Music, Politics and International Relations SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 12.00 noon - 2.00 pm Mon

This module explores the complex relationship between the arts and politics, focusing on the various ways in which political thinkers and politicians have viewed music, sought to control it or use it to blunt or effect political change. Though very few musicians write explicitly political music, even non-political works can serve to represent or shape group identity, as well as shaping views of the 'other'; it can be used to mobilise groups to political ends (successfully or otherwise); or used as a means of protest and resistance and to subvert political orders. Equally, it can be used for ends that the author did not intend – witness the playing of Bach in Nazi death camps or Ronald Reagan's use of 'Born in the USA'. In this module we will explore the multiple meanings and readings of a range of works relating to some of the following issues: nations and nationalism, the state, political mobilisation and resistance, and questions of race, gender and sexuality, class, war and political violence. Students taking this class will need to be open to a variety of mostly Western musical forms, and composers/performers from Mozart to Plan B.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour lecture (x 11 weeks), 1 x 1-hour tutorial (x 9 weeks) + additional contact hours (TBC)		
	Scheduled learning: 20 hours Guided independent study: 280 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof J Anderson		
Lecturer(s)/Tutor(s):	Prof J Anderson		

## IR4559 Dilemmas of International Governance: Conflict and Human Rights SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 3.00 pm Tue

This module focuses on recent attempts to create institutions norms, rules, and organizations aimed at addressing matters of pressing global concern. It is concerned with the practical policy challenges of contemporary governance: what should be done to reduce violence and promote peace, justice, and human rights, and how can these goals be achieved in a world of finite resources and competing interests? The module begins by introducing the range of actors in global governance, including states, intergovernmental organisations, bureaucracies, judges, and nongovernmental organisations. We then reflect on major theoretical approaches concerning the origins and efficacy of global institutions, asking 'when do institutions matter, and how?' The second half of the module applies these analytic lenses to key case studies including disarmament, humanitarian intervention, the International Criminal Court, and the human rights regime.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations			
Pre-requisite(s):	IR2005 and IR2006	IR2005 and IR2006 Anti-requisite(s): IR4514		IR4514
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour lecture (x 11 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.			
	Scheduled learning: 45 hours Guided independent study: 255 hours			endent study: 255 hours
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Bower			
Lecturer(s)/Tutor(s):	Dr A Bower			

IR4561 Security as Ethics: Rethinking the Global Polity					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	3.00 pm Mon			

As the world becomes increasingly interconnected, and faced with new types of threats and insecurities, questions of ethics or how we should act, which rely on some notion of who 'we' are, become more complex. This module seeks to analyse a number of seemingly intractable global security problems, relating, among others, to health, the environment, migration and political violence, from a different angle and to explore the implications for how we should act in the world to ensure a secure and sustainable future. The module will be structured around Burke and Nymans, eds., Ethical Security Studies (2016) and a range of complementary texts.

Programme module type:	Optional for International Relations and BA Int Hons International Relations		
Pre-requisite(s):	IR2006		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 11 weeks), 1-hour tutorial (x 9 weeks) 2 consultation hours with Coordinator (x 12 weeks)		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof K Fierke		
Lecturer(s)/Tutor(s):	Prof K Fierke		

# IR4563 Rebels, Terrorists, Militias: The Comparative Analysis of Armed Groups SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

This module introduces students to the comparative analysis of armed groups, such as the Taliban and the so-called Islamic State. The first part addresses important conceptual issues, including the differences between "rebel groups," "terrorist organisations," and "militias." The second part then brings together the study of these different types of groups by investigating the organisational challenges that they all face to varying degrees: recruiting and controlling their members, governing civilians under their control, and using violence effectively. The third part focuses on alliance politics both among armed groups and between them and sovereign states. The fourth part analyses different outcomes, asking why some groups remain cohesive while others split into rival organisations, and why some groups succeed whereas others fail. In each tutorial, students apply conceptual and theoretical insights from the lecture by comparing two or more different groups from the same country.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations	
Pre-requisite(s):	IR2005 and IR2006	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture (x 11 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultation hours with Coordinator (x 12 weeks).	
	Scheduled learning: 46 hours Guided independent study: 254 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%	
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%	
Re-Assessment pattern:	3-hour Written Examination = 100%	
Module Co-ordinator:	Dr H Tamm	
Lecturer(s)/Tutor(s):	Dr H Tamm	

### **IR4564 Strategic Studies**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

The aim of this module is to discuss the major shifts and developments in modern strategic thought and practice, as well as some of the powerful factors that determined and are still determining military possibilities in the modern era. We will examine historical case studies and the reasons for changes in the use and application of military force along two axes: chronological and thematic. Starting from the Second World War, we will analyse the evolution of strategic thought and practice in response to political, technological, cultural and other developments. The combination of historical analysis and thematic issues will allow students to develop a more comprehensive picture of the evolution of strategy as well as better understanding and informed critique of major strategic trends and challenges of recent and contemporary history.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 hour lectures (x 11 weeks) and 1 tutorial (x 10 weeks), office hours, review of essay plans, instructions on essays, and individual feedback sessions		
	Scheduled learning: 45 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Schiepers		
Lecturer(s)/Tutor(s):	Dr S Schiepers		

## IR4600 Ideologies and Social Movements in the Middle East SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 12.00 noon Tue

This module examines prominent ideologies in the modern history of the Middle East, and the role ideas play in the political mobilisation of society. The module draws particular attention to anti-colonial, nationalist, religious and liberal social movements; it compares the formation, implementation and evolution of the different sets of ideologies, and the relationships between the social movements and the state. The module aims to a) deepen students' understanding of ideologies in the region, beyond culturalist and power-political frameworks, and b) to highlight the important role of societal forces in Middle East politics.

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Programme module type:	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations		
Pre-requisite(s):	IR2005 and IR2006		
Learning and teaching methods and delivery:	Weekly contact: 1 lecture (x 11 weeks), 1 tutorial (x 11 weeks) 2 office consultation hours (x 12 weeks)		
	Scheduled learning: 46 hours Guided independent study: 254 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr J Gani		
Lecturer(s)/Tutor(s):	Dr J Gani		

IR4601	IR4601 Political Order and Violence in the Middle East						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1		
	Academic year:	2016/7					
	Planned timetable:	11.00 am Tue					

This module examines the causes and consequences of political order and violence in the Middle East. What constitutes a political order? Why and how are political orders established? What role does violence play in constituting political orders? Why and how does violence ensue with the breakdown of political orders? Drawing on IR, Sociological, and State-formation theories, we will examine different episodes of order and violence in contemporary Middle East politics: from the collapse of the Ottoman Empire to the latest Arab Uprisings, looking at colonial orders, regime-society violence, violent resistance against occupation, and civil wars.

Programme module type:	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations			
Pre-requisite(s):	IR2005 and IR2006			
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour lecture (x 10 weeks), 1 x 1-hour tutorial (x 10 weeks), 2 consultative hourswith Coordinator (x 12 weeks). 2 hours examination feedback in week 1 of following semester.			
	Scheduled learning: 46 hours Guided independent study: 254 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%		
	As used by St Andrews:			
	3-hour Written Examination = 50%, Co	ursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr A Saouli			
Lecturer(s)/Tutor(s):	Dr A Saouli			

### **IR4602 International Relations of the Middle East**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	9.00 am 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.

Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006				
Learning and teaching methods and delivery:	Weekly contact: 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.  Scheduled learning: 46 hours  Guided independent study: 254 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%			
	As used by St Andrews:				
	3-hour Written Examination = 50%, Co	ursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%  Prof R Hinnebusch				
Module Co-ordinator:					
Lecturer(s)/Tutor(s):	Prof R Hinnebusch				

### **IR4603 Central Asia in International Politics**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	1.00 pm Tue			

Dramatically and unexpectedly, Central Asia was thrust to independence in 1991. Of all the Soviet republics, the five of Central Asia - Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan - had been the largest net recipients of Soviet aid, had benefited most economically from the Soviet Union and had thus been the most reluctant to break from the Soviet empire. Once the path of independence was followed, each of these five states faced considerable ethnic, state, economic, social and foreign policy challenges. This module aims to analyse these nation- and state-building agendas, seeking to address critically some of the now widely held assumptions about this post-Soviet area. Moreover, located in one of the worlds most strategic zones, between Russia, China and a troubled Middle East, Central Asia relies on its substantial human and natural resources in the renegotiation of its geopolitical status.

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Programme module type:	Optional for International Relations and BA (Intl Hons) International Relations Optional for Middle East Studies				
Anti-requisite(s):	IR4510				
Learning and teaching	Weekly contact: 1 lecture and 1 tutorial.				
methods and delivery:	Scheduled learning: 46 hours	Guided independent study: 254 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%			
	As used by St Andrews:				
	3-hour Written Examination = 50%, Co	oursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr T Faziendero				
Lecturer(s)/Tutor(s):	Dr T Faziendero				

# IR4604 Political Islam and International Relations SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 11.00 am Tue

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.

Programme module type:	Optional for International Relations, Middle East Studies and BA (Intl Hons) International Relations				
Pre-requisite(s):	IR2005 and IR2006 Anti-requisite(s): IR4520				
Learning and teaching methods and delivery:	Weekly contact: 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.				
	Scheduled learning: 46 hours Guided independent study: 254 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr F Volpi Dr F Volpi				
Lecturer(s)/Tutor(s):					

### **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

MN3101	MN3101 Corporate Finance and Control						
SCOTCAT Credits:		20	SCQF Level 9	Semester:	1		
	Academic year:	2016/7 & 2017/8					
Planned timetable: To be arranged							

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 extend 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.

Programme module type:	Compulsory for all Management Science degrees.  Optional for all Management degrees.			
Pre-requisite(s):	MN2001 and MN2002			
Required for:	MN3116			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 9 weeks) and 2 optional consultative hours (x 11 weeks)			
	Scheduled learning: 53 hours Guided independent study: 147 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, C	oursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr L Nguyen			
Lecturer(s)/Tutor(s):	Dr L Nguyen			

### **MN3102 Organisation Studies**

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	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1		
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	4.00 pm - 6.00 p	m				

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.

Programme module type:	Compulsory for all Management degrees			
Pre-requisite(s):	MN2001 and MN2002			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks) and 2 optional consultative hours (x 11 weeks)			
	Scheduled learning: 48 hours Guided independent study: 152 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, C	oursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr G Greig			
Lecturer(s)/Tutor(s):	Dr G Greig, TBC	·		

### **MN3116 Financial Markets and Investments**

SCOTCAT Credits:	20	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for all Management degrees		
Pre-requisite(s):	MN3101		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 48 hours Guided independent study: 152 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Praction	cal Examinations = 0%, Coursework = 50%	
	As used by St Andrews:		
	2-hour Written Examination = 50%,	Coursework = 50%	
Re-Assessment pattern:	3-hour Written Examination = 100%  Dr D Oto-Peralias  Dr D Oto-Peralias		
Module Co-ordinator:			
Lecturer(s)/Tutor(s):			

# MN3126 International Business SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for all Management degrees		
Pre-requisite(s):	MN2001 and MN2002		
Anti-requisite(s):	MN4233		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 48 hours Guided independent study: 152 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, C	Coursework = 40%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr R Brown		
Lecturer(s)/Tutor(s):	Dr R Brown		

### MN3201 Research Methods: 1 SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8

Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Single Honours Management, Single Honours Management Science				
Pre-requisite(s):	Entry to a Single Honours Management or Management Science Degree				
Required for:	MN4301	MN4301			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 3 weeks), and 2 optional consultative hours ( x 11 weeks)				
	Scheduled learning: 47 hours Guided independent study: 153 hours				
Assessment pattern:	As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews:  Coursework = 100%				
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%				
Module Co-ordinator:	Prof H T O Davies				
Lecturer(s)/Tutor(s):	Prof H T O Davies				

# MN3202 Research Methods: 2 SCOTCAT Credits: 20 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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 focused research proposals.

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Programme module type:	Compulsory for Single Honours Management, Single Honours Management Science				
Pre-requisite(s):	Entry to a Single Honours Management or Management Science Degree				
Co-requisite(s):	MN3201 Required for: MN4301				
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 5 weeks) and at least 4 hours of supervisory meeting)  Scheduled learning: 14 hours  Guided independent study: 188 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%  Dr C Akinci				
Module Co-ordinator:					
Lecturer(s)/Tutor(s):	Team taught				

### **MN4100 Contemporary Issues in Management**

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SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8  Available only to students on a Management Honours programme.  To be arranged.			
Availability restrictions:				programme.
Planned timetable:				

This module provides a learning experience in which management students (on the single and joint honours pathways) can: reflect back on all the modules they have taken as part of their studies at the University and integrate insights from this prior study; understand and respond to current and likely future challenges that will face them in the near and intermediate future as managers and citizens; and develop skills for being a contributor to responsible enterprise in a number of operational settings.

Programme module type:	Compulsory for all Management degrees, Management Science		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 7 weeks), 1-hour seminar (x 11 weeks), 2 optional consultative hours (x 11 weeks)		
	Scheduled learning: 47 hours Guided independent study: 153 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:  Coursework = 100%		
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%		
Module Co-ordinator:	Prof J Bebbington Team Taught		
Lecturer(s)/Tutor(s):			

### **MN4211 International Marketing**

SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2016/7 To be arranged.			
Planned timetable:				

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.

Programme module type:	Optional for all Management degrees, Management Science		
Pre-requisite(s):	MN2001 and MN2002		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 10 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 54 hours Guided independent study: 146 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, C	Coursework = 50%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M Khalik		
Lecturer(s)/Tutor(s):	Dr M Khalik		

### **MN4213 Human Resource Management SCOTCAT Credits:** SCQF Level 10 Semester: 1 2016/7 Academic year: Planned timetable: 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 Programme module type: Optional for all Management degrees, Management Science Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 Learning and teaching methods and delivery: optional consultative hours (x 11 weeks) **Scheduled learning:** 48 hours Guided independent study: 152 hours Assessment pattern: As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50% As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50% 3-hour Written Examination = 100% Re-Assessment pattern: **Module Co-ordinator:** Dr S A Chillas Lecturer(s)/Tutor(s): Dr S A Chillas

MN4214 Management of Change	N4214 Management of Change					
SCOTCAT Credits:	20	SCQF Level 10	Semester:	2		
Academic year:	2016/7 To be arranged.					
Planned timetable:						
bringing about planned char team building, participation between theory and practice	he process of change and how this process might be managed. Various mode change are analysed and their strengths and weaknesses highlighted. The issuation and resistance to change will be addressed. Case studies enable the actice to be made; these cases will focus on managing technical change, introduction of goods and services.					
Programme module type:	Optional for all Management degrees, Management Science  Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)			cience		
Learning and teaching methods and delivery:				(x 4 weeks), and 2		
	Scheduled learn	ing: 48 hours	Guided indepen	ndent study: 152 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40			0%, Coursework = 40%		
	As used by St Andrews:  2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	Prof K Ball					
Lecturer(s)/Tutor(s):	Prof K Ball	Prof K Ball				

Academic year:

### MN4223 International Banking SCOTCAT Credits: 20 SCQF Level 10 Semester: 2

Planned timetable: 11.00 am - 1.00 pm Fri

2016/7

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.

Programme module type:	Optional for all Management degrees, Management Science		
Pre-requisite(s):	MN2001 and MN2002		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 48 hours Guided independent study: 152 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%		
	As used by St Andrews:  2-hour Written Examination = 70%, Coursework = 30%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof J Wilson		
Lecturer(s)/Tutor(s):	Prof J Wilson		

# MN4227 Corporate Social Responsibility, Accountability and Reporting SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for all Management degrees, Management Science. Optional for Sustainable Development.		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 11 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 55 hours Guided independent study: 145 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%  An alternative project of up to 3,000 words = 100%  Prof Ferguson  Prof Ferguson		
Re-Assessment pattern:			
Module Co-ordinator:			
Lecturer(s)/Tutor(s):			

### MN4236 Sociology of Finance

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	SCOTCAT Credits:	20	SCQF Level 10	Semester:	2	
	Academic year:	2016/7				
	Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for all Management degrees, Management Science		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours (x 11 weeks)		
	Scheduled learning: 48 hours Guided independent study: 152 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%  As used by St Andrews: 2-hour Written Examination = 70%, Coursework = 30%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr P J Roscoe		
Lecturer(s)/Tutor(s):	Dr P J Roscoe	Dr P J Roscoe	

### MN4238 Sustainable Development and Management

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for all Management degrees, Management Science. Optional for Sustainable Development.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 lectures (x 11 weeks) and 1 tutorial (x 9 weeks), and 2 optional consultative hours (x 11 weeks)		
	Scheduled learning: 53 hours Guided independent study: 147 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Russell		
Lecturer(s)/Tutor(s):	Team taught		

# MN4241 Knowledge Work: Practice and Context SCOTCAT Credits: 20 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for all Management degrees		
Pre-requisite(s):	MN2001 and MN2002		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 4 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 48 hours Guided independent study: 152 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%		
Module Co-ordinator:	TBC		
Lecturer(s)/Tutor(s):	TBC		

### **MN4242 Advertising and Marketing Communications**

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SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for all Management degrees		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 tutorial (x 9 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 53 hours Guided independent study: 147 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%		
Module Co-ordinator:	Mr W Barlow		
Lecturer(s)/Tutor(s):	Mr W Barlow		

### MN4243 Philanthropy and Philanthropreneurs: the business of doing good

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for all Management degrees		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 lectures (x 11 weeks) and 1 seminar (x 5 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 49 hours Guided independent study: 151 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%		
	As used by St Andrews:  2-hour Written Examination = 40%, Coursework = 60%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr T Jung		
Lecturer(s)/Tutor(s):	Dr T Jung		

# N4244 Behavioural Decision Making SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for all Management degrees		
Pre-requisite(s):	MN2001 and MN2002		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) and 1 seminar (x 11 weeks), and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 55 hours Guided independent study: 145 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%		
Module Co-ordinator:	Dr C Akinci		
Lecturer(s)/Tutor(s):	Dr C Akinci		

### **MN4245 Leadership Development**

1					
	SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
	Academic year:	2016/7			
	Availability restrictions:	Available only to students on the Second Year of the Honours Programme.		onours Programme.	
	Planned timetable:	To be arranged.			

Drawing on current academic debates, examples of leadership challenges from practice and students' own experiences this module examines how leaders can be developed (by themselves and others) to address evolving strategic contexts and emerging patterns of organisation in the private, public and third sector. Focusing not just on the being and doing of leadership, but also on the becoming the module aims to: - develop students' critical understanding of current leadership theory and practice;

- provide opportunities for students to construct and interpret leadership development experiences;
- support students in developing their effectiveness in a variety of leadership contexts where they may or may not have formal authority.

Programme module type:	Optional for all Management degrees		
Pre-requisite(s):	MN3102, MN2001 and MN2002		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 11 weeks) 1 seminar (x 8 weeks),1 practical class (x 6 weeks) and 3 optional consultative hours (x 11 weeks)		
	Scheduled learning: 69 hours Guided independent study: 131 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:  2-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Romenska		
Lecturer(s)/Tutor(s):	Dr S Romenska		

### MN4263 Entrepreneurship and Small Business Development SCOTCAT Credits: 20 SCQF Level 10 Semester: 1

Academic year: 2016/7

Planned timetable: 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.

Programme module type:	Optional for all Management degrees, Management Science		
Learning and teaching methods and delivery:	<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)		
	Scheduled learning: 54 hours Guided independent study: 146 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%		
Module Co-ordinator:	Mr C Lovatt		
Lecturer(s)/Tutor(s):	Mr C Lovatt		

### MN4266 Non Governmental Organisations (NGOs): Contexts, Contributions, and Challenges

SCOTCAT Credits:	20	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	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.

Programme module type:	Optional for all Management degrees, Management Science. Optional for Sustainable Development.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 lectures (x 11 weeks) and 3 x 1-hour workshops, and 2 optional consultative hours ( x 11 weeks)		
	Scheduled learning: 47 hours Guided independent study: 153 hour		
Assessment pattern:	As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:  Coursework = 100%		
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%		
Module Co-ordinator:	Dr E Burt		
Lecturer(s)/Tutor(s):	Dr E Burt		

# MN4268 Equality and Diversity in Organisations SCOTCAT Credits: 20 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

This module explores Equality and Diversity issues in the context of a range of organisations. We will first develop a clear understanding of the legal framework within which Equality and Diversity issues exist in the UK and the range of E&D issues we will explore including those related to gender, age, disability, and ethnicity. We will explore the individual and group processes which frame the utilisation of stereotypes within organisations and how such devices can produce bias, prejudice and discrimination. We will then examine the relationship between Equality and Diversity issues and organisational culture and sub-culture, organisational success and failure, individual and group performance, and finally, we will explore mechanisms for addressing and managing Equality and Diversity challenges. Students will achieve a comprehensive and deep understanding of Equality and Diversity issues, challenges and initiatives by the end of the module.

A range of theoretically-focused and empirically-focused academic reading will frame students' developing understanding of the key issues explored. Moreover, materials will be used throughout to concretise and contextualise students' understanding of the issue explored. These include developed scenarios, case studies, film clips and extended film viewings.

Programme module type:	Optional for all Management degrees, Management Science.		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (x 10 weeks) 1-hour seminars (x 10 weeks), and 4 optional consultative hours (x 12 weeks) amd 1.5-hours of film screenings (x 3 weeks)		
	Scheduled learning: 82 hours Guided independent study: 118 hou		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%		
Module Co-ordinator:	Prof R Woodfield		
Lecturer(s)/Tutor(s):	Prof R Woodfield, Dr B Bratanova		

# MN4301 Management Project SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 Planned timetable: To be arranged.

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Single Honours Management, Management Science degrees			
Pre-requisite(s):	MN3201 and MN3202	Anti-requisite(s): MN4209		MN4209
Learning and teaching	Weekly contact: 2 hours and at least 6 hours of supervisory meetings			
methods and delivery:	Scheduled learning: 8 hours	Guided independent st		dent study: 192 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Project report / dissertation = 100%			
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%			
Module Co-ordinator:	Dr G Greig			
Lecturer(s)/Tutor(s):	Team taught			

Planned timetable:

# MN4310 Scenario Thinking SCOTCAT Credits: 20 SCQF Level 10 Semester: 2 Academic year: 2016/7 Availability restrictions: Available only to students in the second year of the Honours Programme.

To be arranged.

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.

Programme module type:	Optional for all Management degrees, Management Science			
Pre-requisite(s):	MN2001 and MN2002	Anti-requisite(s):	MN4225	
Learning and teaching methods and delivery:	Weekly contact: 4 lectures (x 6 weeks) and 2 tutorials (x 6 weeks), and 3 optional consultative hours (x 6 weeks)			
	Scheduled learning: 54 hours Guided independent study: 146 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	An alternative project of up to 3,000 words = 100%			
Module Co-ordinator:	Prof B MacKay			
Lecturer(s)/Tutor(s):	Prof B MacKay			

### **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

TT3501 Linear Mathematics 2	501 Linear Mathematics 2					
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	12.00 noon Mon (even weeks), Tue and Thu					
show the importance of lir geometric applications to diagonalisation and the min	This module continues the study of vector spaces and linear transformations begun in MT2501. It 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 include: diagonalisation and the minimum polynomial; Jordan normal form; inner product spaces; orthonormal sets and the Gram-Schmidt process; adjoint and self-adjoint operators.					
Programme module type:	Compulsory for all MMath programmes, BSc Statistics, BSc joint Honours Statistics programmes, MPhys Mathematics and Theoretical Physics and MPhys Theoretical Physics.					
	Optional for all other undergraduate programmes in the School of Mathematics & Statistics.					
Pre-requisite(s):	MT2001 or MT2501					
Required for:	MT4003, MT4111, MT4112, MT4501, MT4513, MT4519, MT4607, MT4608, MT4614, MT5827					
Learning and teaching methods and delivery:						
methous and delivery.	Scheduled learning	g: 35 hours	Guided indepen	dent study: 115 hours		
Assessment pattern:	Assessment pattern: As defined by QAA:					
	Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%					
	As used by St Andrews:					
	2-hour Written Examination = 90%, Coursework = 10%					
Re-Assessment pattern:	2-hour Written Examination = 100%					
Module Co-ordinator:	Dr J J McDermott					
Lecturer(s)/Tutor(s):	Dr J J McDermott					

# MT3502 Real Analysis SCOTCAT Credits: 15 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am Mon (even weeks), Tue & Thu

This module continues the study of analysis begun in the 2000-level module MT2502 Analysis. It considers further important topics in the study of real analysis including: integration theory, the analytic properties of power series and the convergence of functions. Emphasis will be placed on rigourous development of the material, giving precise definitions of the concepts involved and exploring the proofs of important theorems. The language of metric spaces will be introduced to give a framework in which to discuss these concepts.

Programme module type:	Compulsory for MMath Mathematics, Applied Mathematics and Pure Mathematics programmes				
	Optional for all other undergraduate programmes in the School of Mathematics & Statistics.				
Pre-requisite(s):	MT2502				
Required for:	MT4004, MT4111, MT4501, MT4513, MT4519, MT5825, MT5830				
Learning and teaching	Weekly contact: 2.5-hours of lectures and 1 tutorial.				
methods and delivery:	Scheduled learning: 35 hours	Guided independent study: 115 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 100%, Practica	Examinations = 0%, Coursework = 0%			
	As used by St Andrews:				
	2-hour Written Examination = 90%, Class Test = 10%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Prof K J Falconer				
Lecturer(s)/Tutor(s):	Prof K Falconer				

MT3503 Complex Analysis						
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Planned timetable: 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; Rouche's Theorem.

Programme module type:	Compulsory for MMath Applied Mathematics, MMath Mathematics, and MMath Pure Mathematics.			
	Optional for all other undergraduate programmes in the School of Mathematics & Statistics.			
Pre-requisite(s):	MT2502 or MT2503 or MT2001			
Required for:	MT4005, MT4111, MT4112, MT4501, MT4513, MT4519, MT4608, MT5802			
Learning and teaching				
methods and delivery:	Scheduled learning: 35 hours	Guided independent study: 115 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 90%, Practical	Examinations = 0%, Coursework = 10%		
	As used by St Andrews:			
	2-hour Written Examination = 90%, Co	ursework = 10%		
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr J N Reinaud			
Lecturer(s)/Tutor(s):	Dr J N Reinaud			

# MT3504 Differential Equations SCOTCAT Credits: 15 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8

9.00 am Mon (odd weeks), Wed and Fri

Planned timetable:

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; non-linear ODE's; phase-plane analysis; Green's functions for ODE's; Sturm-Liouville problems; first order PDE's; method of characteristics; classification of second order linear PDE's; method of separation of variables; characteristics and reduction to canonical form.

Programme module type:	Compulsory for MMath Applied Mathematics, MMath Mathematics, MMath Pure Mathematics, MPhys Mathematics and Theoretical Physics.  Optional for all other undergraduate programmes in the School of Mathematics & Statistics.			
Pre-requisite(s):	MT2001 or MT2503			
Required for:	MT3506, MT4005, MT4111, MT4112, MT4501, MT4507, MT4508, MT4509, MT4510, MT4511, MT4513, MT4519, MT4551, MT4552, MT4608, MT5852			
Learning and teaching				
methods and delivery:	Scheduled learning: 35 hours	Guided independent study: 115 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews:			
	Written Examination = 100% (2-hour final exam = 90%, class test = 10%)			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr R K Scott			
Lecturer(s)/Tutor(s):	Dr R K Scott			

MT3505 Algebra: Rings and Fields							
	SCOTCAT Credits: 15 SCQF Level 9 Semester: 2						
	Academic year: 2016/7 & 2017/8						
	Planned timetable: 11.00 am Mon (odd weeks), Wed & Fri						

This module continues the study of algebra begun in the 2000-level module MT2505 Abstract Algebra. It places emphasis on the concept of a ring and their properties, which give insight into concepts of factorisation and divisibility. Important examples such as polynomial rings will be used to motivate and illustrate the theory developed.

Programme module type:	Compulsory for MMath Pure Mathematics Optional for all other undergraduate programmes in the School of				
	Mathematics & Statistics.				
Pre-requisite(s):	MT2505	Ar	nti-requisite(s):	MT4517	
Required for:	MT4111, MT4501, MT4519, MT582	23, N	/IT5827, MT5836		
Learning and teaching	rearning and teaching nethods and delivery:  Weekly contact: 2.5 hours of lectures and 1 tutorial.  Scheduled learning: 35 hours  Guided independent study: 115 hours				
methods and delivery:					
Assessment pattern:	As defined by QAA:				
	Written Examinations = 90%, Practi	cal I	Examinations = 0%	%, Coursework = 10%	
	As used by St Andrews:				
	2-hour Written Examination = 90%,	Cou	ursework = 10%		
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr C M Roney-Dougal				
Lecturer(s)/Tutor(s):	Dr C M Roney-Dougal				

Re-Assessment pattern:

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

MT350	IT3506 Techniques of Applied Mathematics							
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2			
	Academic year:	2016/7 & 2017/8	2016/7 & 2017/8					
	Planned timetable:	12.00 noon Mon (	12.00 noon Mon (odd weeks), Wed & Fri					
	important and common te	f fundamental significance in applied mathematics. This module will cover hniques used to solve the partial differential equations that arise in typical ll be useful to students who wish to specialise in Applied Mathematics in their						
	Programme module type:	Compulsory for MMath Applied Mathematics Optional for all other undergraduate programmes in the School of Mathematics & Statistics.						
	Pre-requisite(s):	MT2506 and MT3	504	Anti-requisite(s):	MT3601			
	Required for:	MT4111, MT4501						
	Learning and teaching	Weekly contact: 2	2.5 hours of lecture	s and 1 tutorial.				
	methods and delivery:	Scheduled learning: 35 hours Guided independent study: 115 hours						
	Assessment pattern:	As defined by QAA: Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%						
		As used by St Andrews: 2-hour Written Examination = 90%, Coursework = 10%						

MT3507 Mathematical Statistics								
	SCOTCAT Credits: 15 SCQF Level 9 Semester: 1							
	Academic year:	emic year: 2016/7 & 2017/8						
	Planned timetable: 11.00 am Mon (odd weeks), Wed & Fri							

2-hour Written Examination = 100%

Dr R K Scott

Dr R K Scott

Together with MT3508, this module provides a bridge between second year and Honours modules in statistics. It will provide students with a solid theoretical foundation on which much of more advanced statistical theory and methods are built. This includes probability generating functions and moment generating functions, as well as widely used discrete distributions (binomial, Poisson, negative binomial and multinomial) and continuous distributions (gamma, exponential, chi-squared, beta, t-distribution, F-distribution, and multivariate normal). It will also provide a foundation in methods of statistical inference (maximum likelihood and Bayesian) and model selection methods based on information theory (AIC and BIC).

Programme module type:	Compulsory for BSc/MA Statistics degrees (both single and joint Honours) and for MMath Statistics Optional for all other undergraduate programmes in the School of Mathematics & Statistics.			
Pre-requisite(s):	MT2508	Anti-requisite(s):	MT3606	
Required for:	MT4501, MT4531, MT4537, MT460	06, MT4609, MT5701	l, MT5751	
Learning and teaching	Weekly contact: 2.5 hours of lectures and 1 tutorial.			
methods and delivery:	Scheduled learning: 35 hours	Guided indepe	ndent study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Prac	tical Examinations =	0%, Coursework = 0%	
	As used by St Andrews:			
	2-hour Written Examination = 90%,	Class Test = 10%		
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Prof S T Buckland			
Lecturer(s)/Tutor(s):	Prof S T Buckland			

# MT3508 Applied Statistics SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 12.00 noon Mon (even weeks), Tue & Thu

Together with MT3507, this module provides a bridge between second year and Honours modules in statistics. It deals with the application of statistical methods to test hypotheses and draw inferences from data. This includes a number of nonparametric methods and statistical tests (permutation and randomization tests, goodness-of-fit tests and tests of independence). Inference methods include model fitting by least squares and maximum likelihood, and variance estimation by means of the information matrix and by bootstrap. Applications include multiple regression, analysis of variance, the general (normal) linear model and an introduction to generalized linear models and generalized additive models.

Programme module type:	Compulsory for BSc/MA Statistics degrees (both single and joint Honours) and for MMath Statistics  Optional for all other undergraduate programmes in the School of Mathematics & Statistics.				
Pre-requisite(s):	MT2508	Anti-requisite(s):	MT3606		
Required for:	MT4501, MT5751				
Learning and teaching	Weekly contact: 2.5 hours of lectur	es and 1 tutorial.			
methods and delivery:	Scheduled learning: 35 hours	Guided indepe	Guided independent study: 115 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%				
	As used by St Andrews:  2-hour Written Examination = 90%, Coursework (Project) = 10%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Prof D L Borchers				
Lecturer(s)/Tutor(s):	Prof D L Borchers				

MT3802 Numerical Analysis							
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1			
Academic year:	2016/7 & 2017/8						
Planned timetable:	10.00 am Mon (odd weeks), Wed and Fri						
		tudents to some topics in numerical analysis, which may include methods of egration, solution of systems of linear equations by elimination and by iterative					
Programme module type:	Optional for all pr	Optional for all programmes in the School.					
Pre-requisite(s):	MT2001 or MT2501						
Required for:	MT5806						
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 tutor	ial (weeks 2 - 11).			
methods and delivery:	Scheduled learning	ng: 35 hours	Guided indepe	ndent study: 115 hours			
Assessment pattern:	As defined by QA Written Examinat		l Examinations = (	0%, Coursework = 20%			
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework = 20%						
Re-Assessment pattern:	2-hour Written Examination = 100%						
Module Co-ordinator:	Dr A P Naughton						
Lecturer(s)/Tutor(s):	Dr A P Naughton						

MT3832 Mathematical Program	832 Mathematical Programming					
SCOTCAT Credits:	15	SCQF Level 9	Semester:	2		
Academic year:	2017/8	2017/8				
Planned timetable:	12.00 noon Mon (odd weeks), Wed and Fri					
programming problems. The examples. The syllabus inc	odule is to introduce students to the formulation and solution of various linear ms. The subject matter will be illustrated by applying the methods of solution to real bus includes: formulation of linear problems; solution graphically and by simplex analysis; duality; transportation and transshipment; the assignment problem.					
Programme module type:	Compulsory for all single and joint Honours BSc Management Science degree programmes  Optional for all programmes in the School					
Pre-requisite(s):	MT2001 or MT250	01 or (MT1002 and	MN2002)			
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 0.5 tuto	rial (weeks 2 - 11).		
methods and delivery:	Scheduled learning	ng: 30 hours	Guided indepen	dent study: 120 hours		
Assessment pattern:	As defined by QA Written Examinat		cal Examinations = 0	0%, Coursework = 0%		
	As used by St Andrews: 2-hour Written Examination = 100%					
Re-Assessment pattern:	2-hour Written Examination = 100%					
Module Co-ordinator:	Dr V Popov					
Lecturer(s)/Tutor(s):	Dr V Popov		·			

	and Complexity				
SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Availability restrictions:	Not available to Jo	oint Honours Mathe	ematics and Compu	uter Science students.	
Planned timetable:	10.00 am Mon (ev	ven weeks), Tue, Th	ıu.		
This module begins with fini non-determinism and pushe and the Halting problem. The and graph isomorphism. Sti followed by an introduction	down automata are e complexity classe rengths and limitat	e introduced, follow s P, NP, co-NP, NP- tions of the abstra	wed by studies on hard, etc., are desc	decidability, simulation ribed via analysis of SA	
Programme module type:	Optional to all programmes in the School of Mathematics & Statistics - except Computer Science - Mathematics joint Honours				
	MT2504 or ((CS2001 or CS2101) and CS2002)				
Pre-requisite(s):	MT2504 or ((CS20	001 or CS2101) and	CS2002)		
Learning and teaching	, ,	•		ur tutorial (x 10 weeks)	
Learning and teaching	, ,	2 hours of lectures	(x 11 weeks), .5-ho	ur tutorial (x 10 weeks) ndent study: 123 hours	
Learning and teaching methods and delivery:	Weekly contact: 2 Scheduled learning As defined by QA	2 hours of lectures ong: 27 hours A:	Guided independent	· · · · · · · · · · · · · · · · · · ·	
Learning and teaching methods and delivery:	Weekly contact: 2 Scheduled learnin As defined by QA Written Examinat As used by St And	2 hours of lectures on the second of lectures on the second of lectures on the second of lectures of lectures on the second of lectures of	Guided independent of Examinations = 0	ndent study: 123 hours	
Learning and teaching methods and delivery: Assessment pattern:	Weekly contact: 2 Scheduled learnin As defined by QA Written Examinat As used by St And 2-hour Written Ex	2 hours of lectures ong: 27 hours  A: ions = 60%, Practical  A: Irews:	Guided independent of Examinations = 0	ndent study: 123 hours	
	Weekly contact: 2 Scheduled learnin As defined by QA Written Examinat As used by St And 2-hour Written Ex	2 hours of lectures on the second sec	Guided independent of Examinations = 0	ndent study: 123 hours	

# MT4003 Groups SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 9.00 am Mon (even weeks), Tue and Thu

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.

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.			
MT3600 or (MT2002 and MT3501) or N	MT2505		
MT5823, MT5824, MT5827			
Weekly contact: 2.5 lectures (weeks 1 - 10), 1 tutorial and 1 examples class (weeks 2 - 11).			
Scheduled learning: 45 hours	Guided independent study: 105 hours		
As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
As used by St Andrews:			
2-hour Written Examination = 100%			
2-hour Written Examination = 100%			
Prof I Rivin			
Prof I Rivin			
	At least two from MT4003, MT4004, M compulsory for MMath Mathematics. Optional for all other programmes in the MT3600 or (MT2002 and MT3501) or M MT5823, MT5824, MT5827  Weekly contact: 2.5 lectures (weeks 1 (weeks 2 - 11).  Scheduled learning: 45 hours  As defined by QAA: Written Examinations = 100%, Practical As used by St Andrews: 2-hour Written Examination = 100%  Prof I Rivin		

# MT4004 Real and Abstract Analysis SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am Mon (even weeks), Tue and Thu

This module continues the development of real analysis that was begun in MT2502 and continued through MT3502. Topics covered will include limits and continuity in metric spaces, differentiation in higher dimensions and the theoretical underpinning of Fourier series. This module will present some of the highlights of the study of analysis, such as Baire's Category Theorem, the Contraction Mapping Theorem, the Weierstrass Approximation Theorem, and the Inverse Function Theorem.

The second secon				
Programme module type:	Compulsory for M.Math. Pure Mathematics. At least two from MT4003, MT4004, MT4509, MT4510 and MT4606 compulsory for M.Math. Mathematics.			
	Optional for all other programmes in the	ne School.		
Pre-requisite(s):	MT3502			
Required for:	MT4526, MT5825, MT5830			
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10), 1 tutorial (weeks 2 - 11).			
methods and delivery:	Scheduled learning: 35 hours Guided independent study: 115 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews: 2-hour Written Examination = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Prof L Olsen			
Lecturer(s)/Tutor(s):	Prof L Olsen			

#### **MT4005 Linear and Nonlinear Waves**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	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.

Programme module type:	Compulsory for MMath Applied Mathematics. Optional for all other programmes in the School.				
Pre-requisite(s):	(MT2003 or MT2506 or PH3081) and (M	MT3503 or MT3504)			
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
methods and delivery:	Scheduled learning: 35 hours Guided independent study: 115 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews: 2-hour Written Examination = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr A N Wright				
Lecturer(s)/Tutor(s):	Dr A N Wright				

# MT4111 Symbolic Computation SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 9.00 am Mon (odd weeks), Wed and Fri

This module aims to enable students to use a computer as a tool in their other modules and to turn naturally to a computer when solving mathematical problems. The module aims to illustrate the following points: computation

allows one to conduct mathematical experiments; computation 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 computer is not intelligent;

intelligence comes from the user. The user thinks, the user interprets, the computer calculates.

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Programme module type:	At least one of MT4111, MT4112 and MT5611 compulsory for MMath Applied Mathematics and MMath Pure Mathematics  At least one of MT3607, MT4111, MT4113 and MT5611 compulsory for MMath Mathematics				
	At least one of MT3607, MT4111 ar Mathematics and BSc/MA Statistics		/IT4113 compulso	ry for BSc/MA	
	Optional for all other programmes i	n th	ne School.		
Pre-requisite(s):	Any of MT3501 - MT3506	An	nti-requisite(s):	MT5611	
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 practical session (weeks 2 - 11)				
	Scheduled learning: 35 hours		Guided indepen	dent study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%				
	As used by St Andrews:  2-hour Written Examination = 70%, Coursework = 30%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr J D Mitchell				
Lecturer(s)/Tutor(s):	Dr J D Mitchell, Dr C M Roney-Doug	al, T	ГВС		

Computing in Mathem	atics				
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2017/8		•		
Planned timetable:	9.00 am Mon (eve	en weeks), Tue and	Thu		
This module is intended to i mathematical algorithms. The mathematical algorithms in project in addition to sitting	ne module includes a well-documente	a basic introduction	on to FORTRAN, and	the implementation of	
Programme module type:	Mathematics and	MMath Pure Math	nematics	ory for MMath Applied compulsory for MMath	
	Mathematics			, , , , , , , , , , , , , , , , , , , ,	
	At least one of M <sup>-</sup> Mathematics and		d MT4113 compulso	ory for BSc/MA	
	Optional for all ot	her programmes ir	the School.		
Pre-requisite(s):	•	T3501, MT3503 or MT3504  Joint Honours  Programme ir		MT5612, Honours or Joint Honours Programme in Computer Science.	
Co-requisite(s):	either pre- or co-r MT3501, MT3503		Required for:	MT5806	
Learning and teaching methods and delivery:	Weekly contact: 2	2.5 lectures (weeks	1 - 10).		
memous and denvery.	Scheduled learning	ng: 25 hours	Guided indeper	ndent study: 125 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 70%, Practical Examinations = 0%, Coursework = 30%				
	As used by St Andrews:				
	2-hour Written Examination = 70%, Coursework: Project = 30%				
Re-Assessment pattern:	2-hour Written Ex	amination = 100%			
Module Co-ordinator:	Dr D H Mackay				
Lecturer(s)/Tutor(s):	Dr V Archontis, Dr D H Mackay				

#### **MT4113 Computing in Statistics SCOTCAT Credits:** 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 12.00 noon Mon (odd weeks) and Wed, 12.00 noon - 2.00 pm Fri The aim of this module is to teach computer programming skills, including principles of good programming practice, with an emphasis on statistical computing. Practical work focusses on the widely-used statistical language and environment R. Practical skills are developed through a series of computing exercises that include (1) modular programming; (2) manipulating data; (3) simulating data with specific statistical properties, (4) investigating behaviour of statistical procedures under failure of statistical assumptions. Programme module type: Compulsory for MMath Statistics. At least one of MT4111 - MT4113 or MT5611 is compulsory for MMath Mathematics. At least one of MT4111 -MT4113 is compulsory for BSc/MA Mathematics and BSc/MA Statistics Optional for all other programmes in the School of Mathematics & Statistics MT3607 Pre-requisite(s): pre- or co-requisite MT2508 or Anti-requisite(s): MT2004 Co-requisite(s): pre- or co-requisite MT2508 or MT2004 Learning and teaching Weekly contact: 1.5-hour lectures (x 10 weeks), 2-hour practical classes (x 10 methods and delivery: weeks) Guided independent study: 115 hours Scheduled learning: 35 hours Assessment pattern: As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60% As used by St Andrews: Written Examination = 40% (2 x 50-minute class tests), Coursework = 60% Re-Assessment pattern: 1-hour 40 minute Written Examination = 40%,

SCOTCAT Credits:	15	SCQF Level 10	S	Semester:	1	
Academic year:	2017/8	2017/8				
Planned timetable:	12.00 noon Mon (	(odd weeks), Wed	and	l Fri		
The aim of this module is to to be covered may include logarithms, the work of som	some of: the devel	opment of algebra				
Programme module type:	Optional for all pr	ogrammes in the S	Scho	ool.		
Pre-requisite(s):	either pre- or co-requisites: Any of MT3501 - MT3508 or MT3606		nti-requisite(s):	MT5613		
Co-requisite(s):	either pre- or co-r	equisites: Any of I	MT3	3501 - MT3508 or	MT3606	
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).					
methods and delivery:	Scheduled learning	ng: 35 hours		Guided independent study: 115 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews: Written Examination = 50% (2 x 1-hour class tests), Coursework: Project = 50%					
Re-Assessment pattern:	Coursework (new project) = 100%					
Module Co-ordinator:	Dr C P Bleak					
Lecturer(s)/Tutor(s):	Dr C P Bleak, Dr C M Roney-Dougal, I J Falconer					

Coursework (4 new programming assignments) = 60%

Dr E Rexstad

Dr E Rexstad, Dr L Thomas

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

# MT4507 Classical Mechanics SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 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.

Programme module type:	Optional for all programmes in the School			
Pre-requisite(s):	(MT2003 or MT2503 or PH3081) and MT3504			
Required for:	PH4032, PH5004			
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:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews: 2-hour Written Examination = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr A N Wright			
Lecturer(s)/Tutor(s):	Dr A N Wright			

### **MT4508 Dynamical Systems**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2		
Academic year:	2017/8					
Planned timetable:	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.

Programme module type:	Optional for all programmes in the School				
Pre-requisite(s):	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:	As defined by QAA:				
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	2-hour Written Examination = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Prof T Neukirch				
Lecturer(s)/Tutor(s):	Dr A P Naughton, Prof T Neukirch				

Fluid Dynamics					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	11.00 am Mon (ev	ven weeks), Tue and	l Thu		
This module provides an in- motion of liquids and gases precise foundation of the va framework in which to study	at speeds small crious conservation	ompared to the so laws that govern flu	und speed. Specia id dynamics, as thi	I attention is paid to a s provides a convenient	
Programme module type:	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.				
Pre-requisite(s):	(MT2506 and MT3	3504) or MT3601			
Required for:	MT5809				
Learning and teaching methods and delivery:	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 tutori	al (weeks 2 - 11).	
	Scheduled learning	ng: 35 hours	Guided indeper	ndent study: 115 hours	
Assessment pattern:	As defined by QA	A:	•		
	Written Examinat	ions = 100%, Practio	cal Examinations =	0%, Coursework = 0%	
	As used by St Andrews:				
	Written Examination = 100% (2-hour final exam = 90%, class test = 10%)				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr M Carr				
Lecturer(s)/Tutor(s):	Dr M Carr				

0 Solar Theory					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	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.					
Programme module type:	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.				
Pre-requisite(s):	(MT2506 and MT3 MT3601	(MT2506 and MT3504) or MT3601		MT4504, MT5804	
Required for:	MT5810	·			
Learning and teaching methods and delivery:	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 tutoria	al (weeks 2 - 11).	
methous and delivery.	Scheduled learning	Scheduled learning: 35 hours		ident study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St And	lrews:			
	2-hour Written Examination = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Prof I De Moortel				
Lecturer(s)/Tutor(s):	Prof I De Moortel,	Prof A W Hood			

511 Asymptotic Methods					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	9.00 am Mon (eve	en weeks), Tue and	Thu		
_	introduce students to asymptotic methods used in the construction of analytical and solutions of differential equations.				
Programme module type:	Optional for all programmes in the School				
Pre-requisite(s):	MT3504				
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
methods and denvery.	Scheduled learning: 35 hours Guided independent study: 115 hours			ndent study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St And	•		,	
	2-hour Written Examination = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	ТВС				
Lecturer(s)/Tutor(s):	ТВС				

# MT4513 Fractal Geometry SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2017/8 Planned timetable: 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.

Programme module type:	Optional for all programmes in the School.			
Pre-requisite(s):	(MT2503 or MT2001) and any one of MT3501 - MT3504	y Anti-requisite(s):		MT5813
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).			
methous and delivery.	Scheduled learning: 35 hours Guided independent study: 1		dent study: 115 hours	
Assessment pattern:	As defined by QAA:			
	Written Examinations = 100%, Pract	tical	Examinations = 0	0%, Coursework = 0%
	As used by St Andrews:			
	2-hour Written Examination = 100%	ó		
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Prof K J Falconer			
Lecturer(s)/Tutor(s):	Prof K J Falconer		<u> </u>	

MT451	4 Graph Theory						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
	Academic year:	2016/7	2016/7				
	Planned timetable:	10.00 am Mon (even weeks), Tue and Thu					
	connections between data.	of this module is to introduce students to the study of graph theory as a tool for representing ns between data. Topics to be covered may include: basic theory and applications, Eulerian graphs, an graphs, planar graphs, spanning trees and applications, networks, matching problems.					
	Programme module type:	Optional for all pr	Optional for all programmes in the School.				
	Pre-requisite(s):	MT1003 or MT2504 or MT2005					
	Required for:	MT5821					
	Learning and teaching methods and delivery:	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 tutori	al (weeks 2 - 11).		
		Scheduled learning	ng: 35 hours	Guided indeper	ndent study: 115 hours		
	Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
		As used by St Andrews: 2-hour Written Examination = 100%					
	Re-Assessment pattern:	2-hour Written Examination = 100%					
	Module Co-ordinator:	TBC					
	Lecturer(s)/Tutor(s):	TBC					

Re-Assessment pattern:

Module Co-ordinator:

Lecturer(s)/Tutor(s):

MT4515 Functional Analysis						
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2		
Academic year:	2016/7					
Planned timetable:	12.00 noon Mon (	even weeks), Tue a	nd Thu			
analysis on normed spaces	ale is to familiarise students with the basic notions of functional analysis, that is ces and Hilbert space. The module will cover normed spaces, convergence and the Hahn-					
Programme module type:	Optional for all programmes in the School					
Pre-requisite(s):	MT2002 or (MT2501 and MT2502)					
Required for:	MT5830					
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:	As defined by QAA:					
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews:					
	2-hour Written Ex	amination = 100%				

L6 Finite Mathematics					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2017/8				
Planned timetable:	10.00 am Mon (ev	en weeks), Tue and	Thu		
structures. This theory has	to introduce students to some topics in the mathematics of combinatorial wide applications, both in classical mathematics and in theoretical computer d may include: coding theory, finite geometries, Latin squares, designs.				
Programme module type:	Optional for all programmes in the School.				
Pre-requisite(s):	MT2504 or MT2505 or MT2002 or MT2005				
Required for:	MT5826				
Learning and teaching methods and delivery:	Weekly contact: 2	5 lectures (weeks 1	L - 10) and 1 tutoria	al (weeks 2 - 11).	
memous and denvery.	Scheduled learning	g: 35 hours	Guided indepen	dent study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews: 2-hour Written Examination = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr C M Roney-Dougal				
Lecturer(s)/Tutor(s):	Dr C M Roney-Dou	ıgal, Prof I Rivin			

2-hour Written Examination = 100%

TBC

TBC

MT4519	1519 Number Theory						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2		
	Academic year:	2017/8					
	Planned timetable:	10.00 am Mon (ev	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 pr	Optional for all programmes in the School.				
	Pre-requisite(s):	(MT2505 or MT2002) and one of MT3501 - MT3505					
	Learning and teaching methods and delivery:	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 tutoria	al (weeks 2 - 11).		
	memous and deniety.	Scheduled learning	g: 35 hours	Guided indepen	dent study: 115 hours		
	Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
		As used by St Andrews:					
		2-hour Written Examination = 100%					
	Re-Assessment pattern:	2-hour Written Examination = 100%					
	Module Co-ordinator:	Dr C P Bleak					
	Lecturer(s)/Tutor(s):	Dr C P Bleak					

MT4526 Topology					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
	Academic year:	2017/8			
	Planned timetable:	10.00 am Mon (odd weeks), Wed and Fri			

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.

Programme module type:	Optional for all programmes in the School.		
Pre-requisite(s):	MT2002 or MT2502 or MT3600 or MT4004		
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).		
memous and denicely.	Scheduled learning: 35 hours Guided independent study: 115 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews:		
	2-hour Written Examination = 100%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr J D Mitchell		
Lecturer(s)/Tutor(s):	Prof P J Cameron, Dr J D Mitchell		

Time Series Analysis						
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2		
Academic year:	2016/7	2016/7				
Planned timetable:	10.00 am 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.						
Programme module type:	MT4527 or MT46	MT4527 or MT4608 is compulsory for MMath Statistics.				
	At least two from MT3706, MT4527, MT4528, MT4608 compulsory for BSc Management Science (single Honours).					
	Optional for all other programmes in the School.					
Pre-requisite(s):	MT2004 or MT2508					
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 0.5 tuto	rial (weeks 2 - 11).		
methods and delivery:	Scheduled learning	ng: 30 hours	Guided indeper	ndent study: 120 hours		
Assessment pattern:	As defined by QA	A:				
	Written Examinat	ions = 100%, Praction	al Examinations = 0	0%, Coursework = 0%		
	As used by St Andrews:					
	2-hour Written Examination = 100%					
Re-Assessment pattern:	2-hour Written Examination = 100%					
Module Co-ordinator:	Dr V M Popov					
Lecturer(s)/Tutor(s):	Dr V M Popov					

Markov Chains and Pro	ocesses			
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2017/8			
Planned timetable:	11.00 noon Mon (	even weeks), Tue a	ınd Thu	
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, 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 and hidden Markov models.				
Programme module type:	At least two from MT3706, MT4527, MT4528, MT4608 compulsory for BSc Management Science (single Honours).  Optional for all undergraduate programmes in the School of Mathematics & Statistics.			
Pre-requisite(s):	MT2504 or MT200	04	Anti-requisite(s):	MT3706
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 8 tutoria	als over the semester.
methods and delivery:	Scheduled learning	ng: 33 hours	Guided indepen	ndent study: 117 hours
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews: 2-hour Written Examination = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr V Popov	Dr V Popov		
Lecturer(s)/Tutor(s):	Dr V Popov			

# MT4530 Population Genetics SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2017/8 Planned timetable: 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.

Programme module type:	Optional for all programmes in the School.			
Pre-requisite(s):	MT2004 or MT2508			
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11).			
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 120 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews:			
	2-hour Written Examination = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr I B J Goudie			
Lecturer(s)/Tutor(s):	Dr I B J Goudie			

Bayesian Inference					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8		•	•	
Planned timetable:	10.00 am Mon (ev	ven weeks), Tue an	d 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.					
Programme module type:	At least two of MT4531 (or MT5831), MT4608 and MT4609 compulsory for BSc Statistics.  MT4531 or MT4606 (or MT5831 or MT5701) compulsory for BSc/MA joint Honours Statistics programmes.  Optional for all other undergraduate programmes in the School of Mathematics & Statistics.				
Pre-requisite(s):	MT3507 or MT36	06	Anti-requisite(s):	MT5831	
Learning and teaching methods and delivery:	Weekly contact: 2 over the semeste	•	1 - 10) and 8 tutor	als/practical classes	
	Scheduled learning	ng: 33 hours	Guided indepe	ndent study: 117 hour	
Assessment pattern:	As defined by QA Written Examinat		al Examinations = 0	%, Coursework = 20%	
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework = 20%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr L Thomas				
		or L Thomas			

# MT4537 Spatial Processes SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2017/8 Planned timetable: 10.00 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 kirging approaches and spatial models for lattice data (CAR model, Gauss Markov random fields) are also discussed.

Programme module type:	Optional for all programmes in the School.				
Pre-requisite(s):	MT3507 or MT3606	Anti-requisite(s): MT4536			
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 4 tutorials over the semester.				
•	Scheduled learning: 29 hours Guided independent study: 121 hours			dent study: 121 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 100%, Pract	ical I	Examinations = 0	)%, Coursework = 0%	
	As used by St Andrews:				
	2-hour Written Examination = 100%	)			
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr J B Illian				
Lecturer(s)/Tutor(s):	Dr J B Illian, Dr L Scott-Hayward				

1 Financial Mathematics					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2017/8				
Planned timetable:	10.00 am Mon (od	ld weeks), Wed and	Fri		
include an overview of finan	the application of mathematical models to financial instruments. The course will note that the terminology in common usage but the emphasis will be on nof risk and return as a means of pricing contracts and options.				
Programme module type:	Optional for all programmes in the School of Mathematics & Statistics.				
Pre-requisite(s):	(MT2001 or MT2503) and (MT1007 or MT2004 or MT2504 or EC2003) and MT3504				
Required for:	MT5812				
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
methods and delivery:	Scheduled learnin	g: 35 hours	Guided independent study: 115 hours		
Assessment pattern:	As defined by QA	A:	•		
	Written Examinati	ions = 100%, Practio	al Examinations = 0	0%, Coursework = 0%	
	As used by St And	rews:			
	2-hour Written Examination = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr D H Mackay				
Lecturer(s)/Tutor(s):	Dr D H Mackay				

# MT4552 Mathematical Biology 1 SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 9.00 am Mon (even weeks), Tue and Thu

This module will explore real world applications of mathematics to biological problems e.g. harvesting of fish stocks, host-parasitoid systems, predator-prey dynamics, molecular interactions. The mathematical techniques used in the modelling will be nonlinear difference equations and ordinary differential equations. The module will be useful to students who wish to specialise in Applied Mathematics in their degree programme.

Programme module type:	Optional for all programmes in the School of Mathematics & Statistics.				
Pre-requisite(s):	MT3504				
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
methods and delivery:	Scheduled learning: 35 hours	Guided independent study: 115 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews: 2-hour Written Examination = 90%, Coursework (Class Test) = 10%				
Re-Assessment pattern:	Take-Home Examination = 100%				
Module Co-ordinator:	Dr C Venkataraman				
Lecturer(s)/Tutor(s):	Dr C Venkataraman				

MT4553 Theory of Electric and Magnetic Fields						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
	Academic year:	2016/7				

Planned timetable: 10.00 am Mon (odd weeks), Wed, Fri

The module will consider the mathematical and physical principles that describe the theory of electric and magnetic fields. It will first describe the basic principles of electrostatics and magneto-statics and following this electrodynamics. Next Maxwell's equations are described along with the properties of electro-magnetic waves in a variety of media. Finally an application to the area of plasma physics is carried out through considering the orbits of charged particles in a variety of spatially and time varying magnetic fields.

Programme module type:	Optional for all programmes within the School of Mathematics & Statisticd (except Joint Mathematics and Physics or Mathematics and Theoretical Physics)				
Pre-requisite(s):	MT2503, MT2506 and MT3504				
Learning and teaching	Weekly contact: 2.5 lectures (x 10 weeks) and 1 tutorial (x 10 weeks).				
methods and delivery:	Scheduled learning: 35 hours Guided independent study:				
Assessment pattern:	As defined by QAA: Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%				
	As used by St Andrews: 2-hour Written Examination = 90%,	Cou	ursework (class test)	= 10%	
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr D Mackay				
Lecturer(s)/Tutor(s):	Dr D Mackay				

Γ4599 Project in Mathematics	99 Project in Mathematics / Statistics					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	Whole Year		
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8				
Availability restrictions:	Available only to students in the final year of a BSc/MA Honours degree programme in the School					
Planned timetable:	none					
approved. Students will be	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.					
Programme module type:	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.					
Learning and teaching methods and delivery:	Weekly contact: T		rage, 20 mins of pr	oject supervisions per		
	Scheduled learning	ig: 8 hours	Guided indepen	ndent study: 142 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%					
	As used by St Andrews:					
	Coursework = 100%: Project = 80%, Presentation = 20%					
Re-Assessment pattern:	Resubmission of p	project = 100%				
Module Co-ordinator:	Prof C E Parnell					

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MT4606	MT4606 Statistical Inference						
	SCOTCAT Credits:	15	SCQF Level 10	Se	emester:	2	
	Academic year:	2017/8					
	Planned timetable:	10.00 am Mon (od	ld weeks), Wed an	nd Fr	i		
	level Statistics modules car situations. The syllabus inclu	how the methods of estimation and hypothesis testing met in 2000- and 3000- an be justified and derived; to extend those methods to a wider variety of cludes: comparison of point estimators; the Rao-Blackwell Theorem; distribution and the Cramer-Rao lower bound; maximum likelihood estimation; hypothesis-					
	Programme module type:	Optional for all otl	her undergraduate	e pro	ogrammes in the	School	
	Pre-requisite(s):	MT3507 or MT360	06	Ant	ti-requisite(s):	MT5701	
	Learning and teaching	Weekly contact: 2	.5 lectures (weeks	s 1 -	10) and 0.5 tuto	rial (weeks 2 - 11).	
	methods and delivery:	Scheduled learning	g: 30 hours		Guided indepen	dent study: 120 hours	
	Assessment pattern:	As defined by QA Written Examinati		ical I	Examinations = 0	0%, Coursework = 0%	
		As used by St Andrews: 2-hour Written Examination = 100%					
	Re-Assessment pattern:	2-hour Written Examination = 100%					
	Module Co-ordinator:	Dr I B J Goudie					
	Lecturer(s)/Tutor(s):	Dr I B J Goudie					

1T4607 Generalised Linear Mod	607 Generalised Linear Models and Data Analysis						
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1			
Academic year:	2016/7			·			
Planned timetable:	9.00 am Mon (eve	n weeks), Tue and	Thu				
models within the general	T						
Programme module type:	MT4607 (or MT5753) compulsory for BSc/MA single and joint Honours Statistics.  Optional for all other undergraduate programmes in the School.						
Pre-requisite(s):	(MT2001 or MT2503), (MT2004 or MT2508) and either pre- or co- requisite MT3501		Anti-requisite(s	MT5753			
Required for:	MT5757						
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 8 tu	torials over the semester			
methods and delivery:	Scheduled learning: 33 hours		Guided independent study: 117 hours		rs		
Assessment pattern:	As defined by QA. Written Examinat		al Examinations	= 0%, Coursework = 20%			
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework: Project = 20%						
Re-Assessment pattern:	2-hour Written Examination = 100%						
Module Co-ordinator:	ТВС						
Lecturer(s)/Tutor(s):	ТВС						

# MT4608 Sampling Theory SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 10.00 am Mon (odd weeks), Wed and Fri

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.

sampling, claster sampling and anequal probability sampling.				
Programme module type:	MT4527 or MT4608 is compulsory for MMath Statistics. At least two of MT4531 (or MT5831), MT4608 and MT4609 are compulsory for BSc Statistics.			
	At least two from MT3706, MT4527, MT4528, MT4608 are compulsory for BSc Management Science (single Honours).  Optional for all undergraduate other programmes in the School.			
Pre-requisite(s):	MT2004 or MT2508			
Co-requisite(s):	either pre or co-requisite: One of MT3501, MT3503, MT3504, MT3606 or any 3000-level MN module			
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 8 tutorials over the semester.			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 85%, Practical Examinations = 0%, Coursework = 15% As used by St Andrews:			
Re-Assessment pattern:	2-hour Written Examination = 85%, Coursework: Project = 15%			
•	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr J B Illian			
Lecturer(s)/Tutor(s):	Dr J B Illian, Dr V M Popov			

MT4609 Multivariate Analysis						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
	Academic year:	2016/7				
	Planned timetable:	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.

Programme module type:	At least two of MT4531 (or MT5831), MT4608 and MT4609 are compulsory for BSc Statistics.  Optional for all other undergraduate programmes in the School.			
Pre-requisite(s):	MT3507 or MT3606			
Learning and teaching				
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 100%, Practica	I Examinations = 0%, Coursework = 0%		
	As used by St Andrews:			
	2-hour Written Examination = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr I B J Goudie			
Lecturer(s)/Tutor(s):	Dr I B J Goudie			

#### MT4614 Design of Experiments **SCOTCAT Credits:** 15 SCQF Level 10 Semester: 2 **Academic year:** 2016/7 & 2017/8 **Availability restrictions:** Availability subject to confirmation Planned timetable: 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. Programme module type: Optional for all programmes in the School (including MSc programmes). Pre-requisite(s): (MT2004 or MT2508) and MT3501 Learning and teaching Weekly contact: 2.5 lectures (weeks 1 - 10) and either tutorial or practical methods and delivery: (weeks 2 - 11). Scheduled learning: 35 hours Guided independent study: 115 hours Assessment pattern: As defined by QAA: Written Examinations = 80%, Practical Examinations = 10%, Coursework = 10% As used by St Andrews: 2-hour Written Examination = 80%, Presentation = 10%, Coursework = 10% Re-Assessment pattern: 2-hour Written Examination = 100%

MT4794	1T4794 Joint Dissertation (30cr)						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year		
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	have completed tl	he Letter of Agreem	nent, downloadable	ours Programme, who from (url to be Dissertation or Project		
	Planned timetable:	To be arranged.					

The dissertation must consist of approximately 6,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

Prof R A Bailey

Prof R A Bailey

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

Programme module type:	Optional for Joint or 'with' Honours in the School of Mathematics & Statistics					
Pre-requisite(s):	A Letter of Agreement	Anti-requisite(s):	More than 30 credits in other dissertation / project modules			
Learning and teaching methods and delivery:	Weekly contact: As per Letter of Agreement.					
	Scheduled learning: hours	Guided indeper	ndent study: hours			
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %					
	As used by St Andrews:	As used by St Andrews:				
	As per Letter of Agreement.					
Re-Assessment pattern:	As per Letter of Agreement.					
Module Co-ordinator:	As per Letter of Agreement.					

Joint Project (30cr)							
SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year			
Academic year:	2016/7						
Availability restrictions:	Available only to students in the Second year of the Honours Programme, whave completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Proje modules.						
Planned timetable:	To be arranged.						
management and analysis.	s to develop and foster the skills of experimental design, appropriate resear is. The topic and area of research should be chosen in consultation with the determine that the student has access to sources as well as a clear plan						
Programme module type:	Ontional for Joint						
r rogramme module type.	Optional for Joint	or 'with' Honours i	n the School of Ma	thematics & Statistics			
	A Letter of Agreer	1	n the School of Ma Anti-requisite(s):	More than 30 credits in other dissertation / project modules			
Pre-requisite(s):  Learning and teaching	A Letter of Agreer	1	Anti-requisite(s):	More than 30 credits in other dissertation			
Pre-requisite(s): Learning and teaching	A Letter of Agreer	nent As per Letter of Agr	Anti-requisite(s):	More than 30 credits in other dissertation			
Pre-requisite(s):  Learning and teaching methods and delivery:	A Letter of Agreer Weekly contact: A Scheduled learnir As defined by QA	As per Letter of Agro	Anti-requisite(s): eement. Guided indeper	More than 30 credits in other dissertation / project modules			
Pre-requisite(s):  Learning and teaching methods and delivery:	A Letter of Agreer Weekly contact: A Scheduled learnir As defined by QA	As per Letter of Agrong: hours  A: ions = %, Practical E	Anti-requisite(s): eement. Guided indeper	More than 30 credits in other dissertation / project modules			
Pre-requisite(s):  Learning and teaching methods and delivery:  Assessment pattern:	Weekly contact: A Scheduled learnin As defined by QA Written Examinat As used by St And	As per Letter of Agrang: hours  A: ions = %, Practical E	Anti-requisite(s): eement. Guided indeper	More than 30 credits in other dissertation / project modules			

Advanced Symbolic Co SCOTCAT Credits:	20	SCQF Level 11	Semester:	2
Academic year:	2016/7			
Planned timetable:	9.00 am Mon (odd	d weeks), Wed and	Fri	
This module aims to enable to a computer when solvin computation allows one to about a problem being studifferent approaches to a prom the user. The user thin substantial project than that	g mathematical pro- conduct mathem died. This is similar coblem and see whi ks, the user interpr	oblems. The modu atical experiments to the way other ich works. The con ets, the computer	ule aims to illustrat s; computation allo scientists work. It nputer is not intellig	e the following point ws one to collect da- is easier to try sever ent; intelligence come
Programme module type:	Mathematics and	MMath Pure Math	nematics.	ory for MMath Applied
		her undergraduate	programmes in the	School.
Pre-requisite(s):	at least one MT40 module	000-level	Anti-requisite(s):	MT4111
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 practi	cal session (weeks 2 -
methods and delivery:	11).			
methods and delivery:	Scheduled learning	ng: 35 hours	Guided indeper	ndent study: 165 hour
methods and delivery:	Scheduled learning As defined by QA	A:	-	<u> </u>
methods and delivery:	Scheduled learning As defined by QA Written Examinat As used by St And	A: ions = 55%, Practic Irews:	-	%, Coursework = 45%
methods and delivery: Assessment pattern:	Scheduled learning As defined by QA Written Examinat As used by St And 2-hour Written Ex	A: ions = 55%, Practic Irews:	al Examinations = 0	%, Coursework = 45%
methods and delivery:  Assessment pattern:  Re-Assessment pattern:  Module Co-ordinator:	Scheduled learning As defined by QA Written Examinat As used by St And 2-hour Written Ex	A: ions = 55%, Practic lrews: amination = 55%,	al Examinations = 0	ndent study: 165 hour %, Coursework = 45% : = 45%

#### MT5701 Advanced Statistical Inference **SCOTCAT Credits:** SCQF Level 11 Semester: 2 Academic year: 2017/8 Planned timetable: 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. Programme module type: MT5701 or MT5831 is compulsory for MMath Statistics Optional for all other undergraduate programmes in the School. Pre-requisite(s): (MT3507 or MT3606) and any Anti-requisite(s): MT4606 MT4000-level module Learning and teaching Weekly contact: 2.5 lectures (weeks 1 - 10) and 0.5 tutorial (weeks 2 - 11). methods and delivery: Scheduled learning: 30 hours Guided independent study: 170 hours Assessment pattern: As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25% As used by St Andrews: 2-hour Written Examination = 75%, Coursework: Project = 25% Re-Assessment pattern: 2-hour Written Examination = 100%

Dr I B J Goudie

Dr I B J Goudie

Module Co-ordinator:

Lecturer(s)/Tutor(s):

SCOTCAT Credits:	15	SCQF Level 11	Semester:	2	
Academic year:	2016/7				
Planned timetable:	12.00 noon Mon (odd), Wed and Fri				
The module will introduce standing of more advantaged appropriate assessment me population, and perform sin via computer practical session.	detail and panced method thod for a given ple analyses of the contractions of the cont	provide students wit s. By the end of the c en population, be abl of survey data. Studen	h a conceptual course, students v le to design a sim ts will get experie	framework for building will be able to identify apple survey to assess the methon of the methon.	
Programme module type:	At least two of MT5751, MT5752, MT5757, MT5758 and ID5059 compulsory for MMath Statistics.  At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 - MT5830, MT5836, MT5852 and MT5990 compulsory for MMath Mathematics.  Optional for all other undergraduate programmes in the School.				
Pre-requisite(s):	(MT3507 or MT3508 or MT3606) and any MT4000-level module				
Learning and teaching	Weekly contact: 1.5 hrs lecture, 1 hr practical, 0.5 hr tutorial (weeks 1 - 10)				
methods and delivery:	Scheduled lea	arning: 30 hours	Guided indep	endent study: 120 hou	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St 2-hour Writte	Andrews: en Examination = 50%,	Coursework = 50%	6	
Re-Assessment pattern:	2-hour Writte	en Examination = 100%	, )		
	Prof D L Borchers				
Module Co-ordinator:	Prof D L Borci	ners			

# MT5753 Statistical Modelling SCOTCAT Credits: 20 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 4 2016/7 & 2017/8 2016/7 & 2017/8

2.00 pm Mon - Fri (Weeks 5 - 9)

This applied statistics module covers the main aspects of linear models (LMs) and generalized linear models (GLMs). In each case the course describes model specification, various options for model selection, model assessment and tools for diagnosing model faults. Common modelling issues such as collinearity and residual correlation are also addressed, and as a consequence of the latter the Generalized Least squares (GLS) method is described. The GLM component has emphasis on models for count data and presence/absence data while GLMs for multinomial (sometimes called choice-based models) are also covered for nominal and ordinal response outcomes. The largest part of the course material is taught inside an environmental impact assessment case study with reality-based research objectives. Political and medical examples are used to illustrate the multinomial models.

Programme module type:	Compulsory for MMath Statistics				
Pre-requisite(s):	at least one MT4000-level MT4607 MT4607				
Required for:	MT5757				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 6 hours lectures, 1.5 hours tutorials and 6 hours practicals (x 5 weeks).				
	Scheduled learning: 54 hours	0	Guided indeper	ndent study: 146 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	2-hour Written Examination = 100%	6			
Module Co-ordinator:	Ms H Worthington				
Lecturer(s)/Tutor(s):	Ms H Worthington				

Planned timetable:

SCOTCAT Credits:	20	SCQF Level 11	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	12.00 noon Mon (	even weeks), Tue a	nd Thu		

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; LASSO and the Elastic Net; 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 R and the commercial packages SAS.

Programme module type:	At least two of MT5751, MT5752, MT5757, MT5758 and ID5059 compulsory for MMath Statistics. At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5823 - MT5830, MT5852 and MT5990 compulsory for MMath Mathematics.				
	Optional for all other undergraduate programmes in the School.				
Pre-requisite(s):	MT4607 or MT5753				
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 8 tutorials over the semester.				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 167 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Co	ursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr M L MacKenzie				
Lecturer(s)/Tutor(s):	Dr M L MacKenzie, Dr H Worthington				

# MT5758 Applied Multivariate Analysis SCOTCAT Credits: 15 SCQF Level 11 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am Mon (even weeks), Tue and Thu

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.

Programme module type:	At least two of MT5751, MT5752, MT5757, MT5758 and ID5059 compulsory for MMath Statistics.				
	At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 - MT5830, MT5836, MT5852 and MT5990 compulsory for MMath Mathematics.				
	Optional for all other undergraduate programmes in the School.				
Pre-requisite(s):	Acceptance on to MMath Statistics or MMath Mathematics programmes	Anti-requisite(s):	MT4609		
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (week meetings over the semester.	ss 1 - 10), and 4 tutori	als and 4 project group		
	Scheduled learning: 33 hours	Guided indepen	dent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	2-hour Written Examination = 100%	6			
Module Co-ordinator:	Dr V Popov				
Lecturer(s)/Tutor(s):	Dr V Popov				

2 Advanced Analytical Te	echniques				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	12.00 noon Mon (odd weeks), Wed and Fri				
	dents to some further important applied analytic techniques such as Variation and transforms, and the theory of Steepest Descent.				
Programme module type:	At least three from MT5802, MT5806, MT5809, MT5810, MT5852 and MT5990 compulsory for MMath Applied Mathematics.  At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT 5821, MT5823 - MT5830, MT5836, MT5852 and MT5990 compulsory for MMath Mathematics.  Optional for all other undergraduate programmes in the School.				
Pre-requisite(s):	MT3503				
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
methods and delivery:	Scheduled learning	ng: 35 hours	Guided indepe	endent study: 165 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25				
	As used by St And 2-hour Written Ex		Coursework = 25%		
Re-Assessment pattern:	2-hour Written Ex	amination = 100%			
Module Co-ordinator:	Dr C V Tran				
Lecturer(s)/Tutor(s):	Dr C V Tran				

SCOTCAT Credits:  20  SCQF Level 11  Semester:  Academic year:  2016/7 & 2017/8  Planned timetable:  12.00 noon Mon (even weeks), Tue and Thu  This module introduces students to some of the ideas, techniques and constraint approaches to the numerical modeling of physical processes that may be describ equations. Students will gain expertise in implementing standard methods a dissertation together with a portfolio of computational work.  Programme module type:  At least three from MT5802, MT5806, MT5809, MT58: compulsory for MMath Applied Mathematics.	ed by partial differential nd will submit a short				
Academic year:  Planned timetable:  12.00 noon Mon (even weeks), Tue and Thu  This module introduces students to some of the ideas, techniques and constraint approaches to the numerical modeling of physical processes that may be describe equations. Students will gain expertise in implementing standard methods a dissertation together with a portfolio of computational work.  Programme module type:  At least three from MT5802, MT5806, MT5809, MT58	s that underpin modern ed by partial differential nd will submit a short 1.0, MT5852 and MT5990				
Planned timetable: 12.00 noon Mon (even weeks), Tue and Thu  This module introduces students to some of the ideas, techniques and constraint approaches to the numerical modeling of physical processes that may be describe equations. Students will gain expertise in implementing standard methods a dissertation together with a portfolio of computational work.  Programme module type: At least three from MT5802, MT5806, MT5809, MT58.	ed by partial differential nd will submit a short				
This module introduces students to some of the ideas, techniques and constraint approaches to the numerical modeling of physical processes that may be describe equations. Students will gain expertise in implementing standard methods a dissertation together with a portfolio of computational work.  Programme module type: At least three from MT5802, MT5806, MT5809, MT58.	ed by partial differential nd will submit a short				
approaches to the numerical modeling of physical processes that may be describe equations. Students will gain expertise in implementing standard methods a dissertation together with a portfolio of computational work.  Programme module type: At least three from MT5802, MT5806, MT5809, MT58.	ed by partial differential nd will submit a short				
	•				
MT5806, MT5809, MT5810, MT 5821, MT5823 - MT58 and MT5990 compulsory for MMath Mathematics.	At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT 5821, MT5823 - MT5830, MT5836, MT5852				
Pre-requisite(s): MT3802 and MT4112					
Learning and teaching methods and delivery: Weekly contact: 2 lectures (weeks 1 - 10) and a typical project supervisions (weeks 2 - 11)	Weekly contact: 2 lectures (weeks 1 - 10) and a typical average of 0.5 hours of project supervisions (weeks 2 - 11)				
Scheduled learning: 25 hours Guided indep	endent study: 175 hours				
Assessment pattern:  As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0  As used by St Andrews:  Coursework = 100%	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews:				
Re-Assessment pattern: Resubmission of projects = 100%					
Module Co-ordinator: Dr S J Brooks					
Lecturer(s)/Tutor(s): Dr S J Brooks					

SCOTCAT Credits:	20	SCQF Level 11	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	11.00 am Mon (o	dd weeks), Wed an	d Fri			
This module will examine coceanography. The large-scapresence of stable density vortical or eddying motion this slow motion are relative describe the mathematical illustrate the increasingly im	ale atmosphere an stratification and r s (like cyclones) w ely fast wave-like m basis of these f	d oceans behave otation. As a resu hich generally spinotions analogous undamentally diff	quite unlike a 'cla' lt, the fluid motion slower than the to surface waves of erent types of n	issical' fluid owing to the on is dominated by slow Earth. Superimposed o on a pond. These lecture		
Programme module type:	At least three from MT5802, MT5806, MT5809, MT5810, MT5852 and MT5990 compulsory for MMath Applied Mathematics. At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT 5821, MT5823 - MT5830, MT5836, MT5852 and MT5990 compulsory for MMath Mathematics. Optional for all other undergraduate programmes in the School.					
Pre-requisite(s):	MT4509	ner undergraduate	programmes in t	ne sensoi.		
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	s 1 - 10) and 1 tuto	orial (weeks 2 - 11).		
methods and delivery:	Scheduled learning	ng: 35 hours	Guided indep	endent study: 165 hour		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0% As used by St Andrews:					
	2.5-hour Written Examination = 100%					
Do Accocomont nottors	2-hour Written Examination = 100%					
Re-Assessment pattern:  Module Co-ordinator:	Prof D G Dritschel					

LO Advanced Solar Theory							
SCOTCAT Credits:	20	SCQF Level 11	Semester:	1			
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8					
Planned timetable:	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.							
Programme module type:	At least three from MT5802, MT5806, MT5809, MT5810, MT5852 and MT5990 compulsory for MMath Applied Mathematics.  At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT 5821, MT5823 - MT5830, MT5836, MT5852 and MT5990 compulsory for MMath Mathematics.  Optional for all other undergraduate programmes in the School.						
Pre-requisite(s):	MT4510		F 6				
Learning and teaching methods and delivery:	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 tutori	al (weeks 2 - 11).			
memous and deniety.	Scheduled learning	g: 35 hours	Guided indeper	ndent study: 165 hours			
Assessment pattern:	As defined by QA	A:	•				
	Written Examinat	ons = 100%, Praction	cal Examinations =	0%, Coursework = 0%			
	As used by St Andrews:						
	2.5-hour Written Examination = 100%						
Re-Assessment pattern:	2-hour Written Examination = 100%						
Module Co-ordinator:	Prof C E Parnell						
Wiodule Co-ordinator.	Prof C E Parnell Prof C E Parnell						

MT5812 Advanced Financial Mathematics						
	SCOTCAT Credits:	20	SCQF Level 11	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	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).

Programme module type:	Optional for all programmes in the School of Mathematics & Statistics.				
Pre-requisite(s):	MT4551				
Learning and teaching methods and delivery:	Weekly contact: 2 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
,	Scheduled learning: 30 hours Guided independent study: 170 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	2-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr W R Campbell				
Lecturer(s)/Tutor(s):	Dr W R Campbell				

SCOTCAT Credits:	20	SCQF Level 11	Semester:	2	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Availability subjec	t to confirmation			
Planned timetable:	12.00 noon Mon (odd weeks), Wed and Fri				
Combinatorics underlies and interacts many topics in discrete mathematics including group theor statistical design, and statistical mechanics, as well as being a lively subject in its own right. The module we give students a good grounding in the techniques and will engage students with research-level problems. 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, MT5852, MT5990 and ID5059 compulsory for MMath Mathematics.				
	Optional for all other undergraduate programmes in the School.				
Pre-requisite(s):	MT4514 or MT45	16			
Learning and teaching methods and delivery:	Weekly contact: 2 11).	2.5-hour lectures (v	veeks 1 - 10) and 1-	hour tutorial (weeks 2	
	Scheduled learning	ng: 35 hours	Guided indepe	ndent study: 165 hour	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2.5-hour Written Examination = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
	Prof P J Cameron				
Module Co-ordinator:	Prof P J Cameron				

SCOTCAT Credits:	20	SCQF Level 11	Semester:	2		
Academic year:	2017/8	2017/8				
Planned timetable:	9.00 am Mon (odd	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, MT5852, MT5990 and ID5059 compulsory for MMath Mathematics.					
	Optional for all ot	her undergraduate	programmes in the	School.		
Pre-requisite(s):	MT4003 or MT350	05 or MT4517				
Learning and teaching methods and delivery:	Weekly contact: 2 (weeks 2 - 11).	2.5 lectures (weeks	1 - 10), 1 tutorial ar	nd 1 examples class		
	Scheduled learning	ng: 45 hours	Guided indepen	ndent study: 155 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%					
	As used by St Andrews:					
	2-hour Written Examination = 75%, Coursework = 25%					
Re-Assessment pattern:	2-hour Written Ex	amination = 100%				
Module Co-ordinator:	Dr J D Mitchell					
Lecturer(s)/Tutor(s):	Dr J D Mitchell					

MT5823 Semigroups

	Widthernatios	a statistics Ti	onours Leven L	010,7 7 (ugust 2010		
AT5824 Topics in Groups						
SCOTCAT Credits:	20	SCQF Level 11	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	10.00 am Mon (od	dd weeks), Wed and	Fri			
students further into this i selection of topics, some of	dule is to build on the foundations established in MT4003/MT4603, and take the important and beautiful branch of mathematics. More specifically, through a of which will be of current research interest in St Andrews, it will introduce niques of handling groups and classifying them.					
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, MT5852, MT5990 and ID5059 compulsory for MMath Mathematics.					
	Optional for all ot	her undergraduate	programmes in the	School.		
Pre-requisite(s):	MT4003					
Learning and teaching methods and delivery:	Weekly contact: 2 (weeks 2 - 11).	2.5 lectures (weeks 2	1 - 10), 1 tutorial ar	nd 1 examples class		
	Scheduled learning	g: 45 hours	Guided indepen	ndent study: 155 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews: 2.5-hour Written Examination = 100%					
Re-Assessment pattern:	2-hour Written Ex	amination = 100%		_		
Module Co-ordinator:	Dr C P Bleak					
Lecturer(s)/Tutor(s):	Dr C P Bleak					
-						

Measure and Ergodic T	heory				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	11.00 am Mon (od	dd weeks), Wed and	Fri		
are important both in analy module will include topics s	module introduces some of the powerful techniques and ideas of modern mathematical analysis that in portant both in analysis in its own right and in its many applications in mathematics and science. The will include topics such as: measure theory, the ergodic theorem, martingale theory. Analysis is on a cative research areas within the School, and the choice of topics will reflect current activity.				
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, MT5852, MT5990 and ID5059 compulsory for MMath Mathematics.				
Dra vaguisita/a).	Optional for all other undergraduate programmes in the School.				
Pre-requisite(s):	MT3502 or MT400		1 10)   1 1	-1/1-2 44)	
Learning and teaching methods and delivery:		2.5 lectures (weeks	<del></del>		
-	Scheduled learning		Guided indepen	ident study: 165 hour	
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%				
	As used by St Andrews: 2-hour Written Examination = 75%, Coursework = 25%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr M Todd				
Lecturer(s)/Tutor(s):	Dr M Todd				

7 Lie Algebras						
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2		
Academic year:	2017/8					
Availablity restrictions:	Availability to be	Availability to be confirmed closer to the time.				
Planned timetable:	11.00 am Mon (od	dd weeks), Wed and	d Fri			
The aim of this module is algebra has important appligroups.	•			•		
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 (MT3	3505 or MT4003 or	MT4517)			
Learning and teaching	Weekly contact: 2	2.5 lectures (weeks	1 - 10) and 1 tutori	al (weeks 2 - 11).		
methods and delivery:	Scheduled learning	ng: 35 hours	Guided indeper	ndent study: 165 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews: 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: 2016/7 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):	MT3502 or MT4004 or MT4515 Anti-requisite(s): MT5828				
Learning and teaching	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
methods and delivery:	Scheduled learning: 35 hours Guided independent study: 165 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	2.5-hour Written Examination = 100	%			
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr J Fraser				
Lecturer(s)/Tutor(s):	Dr J Fraser				

### MT5831 Advanced Bayesian Inference

SCOTCAT Credits:	20	SCQF Level 11	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	10.00 am Mon (even weeks), Tue and Thu				

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.

Programme module type:	MT5701 or MT5831 is compulsory for MMath Statistics.					
	Optional for all other undergraduate programmes in the School.					
Pre-requisite(s):	MT3606 Anti-requisite(s): MT4531					
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 8 tutorials/practical classes over semester.					
	Scheduled learning: 33 hours Guided independent study: 167 hours					
Assessment pattern:	As defined by QAA:					
	Written Examinations = 60%, Practi	cal E	examinations = 0%	%, Coursework = 40%		
	As used by St Andrews:					
	2-hour Written Examination = 60%,	Cou	ırsework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 100%					
Module Co-ordinator:	Dr L Thomas					
Lecturer(s)/Tutor(s):	Dr L Thomas					

MT5836 Galois Theory	36 Galois Theory							
•			I	T -				
SCOTCAT Credits:	20	SCQF Level 11	Semester:	2				
Academic year:	2016/7							
Planned timetable:	11.00 am Mon (odd weeks), Wed and Fri							
between the theory of poly ideas from the theory of gr There are many application	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.							
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, MT5852, MT5990 and ID5059 compulsory for MMath Mathematics.  Optional for all other undergraduate programmes in the School.							
Pre-requisite(s):	MT3505 or MT452	17	Anti-requisite(s):	MT5826				
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 10 tutorials/practical classes over semester.							
	Scheduled learning	g: 35 hours	Guided indeper	ndent study: 165 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2.5-hour Written Examination = 100%							
Re-Assessment pattern:	2-hour Written Examination = 100%							
Module Co-ordinator:	Dr S Huczynska							
Lecturer(s)/Tutor(s):	Dr S Huczynska, Dr C Roney-Dougal							

SCOTCAT Credits:	20	SCQF Level 11	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	9.00 am Mon (odd weeks), Wed and Fri				
This module will explore rea movement, pattern forma mathematical techniques us will be useful to students wh	ation in animal c sed in the modelling	oat markings, sp g will be nonlinear	read of diseases partial differential	(AIDS, measles). The equations. The module	
Programme module type:	Optional for all undergraduate programmes in the School of Mathematics & Statistics.				
Pre-requisite(s):	MT3504				
Learning and teaching methods and delivery:	Weekly contact: 2.5 lectures (weeks 1 - 10) and 1 tutorial (weeks 2 - 11).				
	Scheduled learning	ng: 35 hours	Guided indeper	ndent study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0  As used by St Andrews: 2-hour Written Examination = 90%, Coursework (Class Test) = 10%				
Re-Assessment pattern:	Take-Home Examination = 100%				
Module Co-ordinator:	Prof M Chaplain				

990 Independent Study Module						
SCOTCAT Credits:	20	SCQF Level 11	Semester:	1 or 2		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Available only to students on an MMath, MPhys or MSc degree programme in the School					
Planned timetable:	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.					
Programme module type:	At least three from MT5802, MT5806, MT5809, MT5810, MT5852 and MT5990 compulsory for MMath Applied Mathematics.  At least three from MT5821, MT5823 - MT5830, MT5836 and MT5990 compulsory for MMath Pure Mathematics.					
	At least 60 credits from MT5751 - MT5753, MT5757, MT5758, MT5802, MT5806, MT5809, MT5810, MT5821, MT5823 - MT5830, MT5836, MT5852 and MT5990 compulsory for MMath Mathematics.					
	Optional for MMath Statistics and MPhys Mathematics and Theoretical Physics.					
Pre-requisite(s):	Permission from the Head of School					
Learning and teaching	Weekly contact: Typically 1 hour project supervisions.					
methods and delivery:	Scheduled learning	g: 12 hours	Guided indepen	dent study: 188 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	Resubmission of coursework = 100%					
Module Co-ordinator:	Dr M L Mackenzie					

91 Professional Skills for Mathematical Scientists						
SCOTCAT Credits:	30	SCQF Level 11	Semester:	Whole Year		
Academic year:	2016/7					
Availability restrictions:	Available only to students on an MSc Postgraduate programme or, exceptionally, on an MMath or MPhys Honours degree programme in the School					
Planned timetable:	To be arranged.					
aimed at providing an app Mathematics. The precise p	a range of skills, both generic and topic specific, together with taught components oppreciation of both breadth and depth of research areas in Pure or Applied programme of study, together with the identification of the relevant software determined in consultation with the student's supervisor.					
Programme module type:	In exceptional circumstances and with the approval of the Head of School, optional for final year of MMath Programme.					
Learning and teaching methods and delivery:	Weekly contact: \	/aries. Typically 1 p	roject supervision p	er week over whole		
	Scheduled learning: 24 hours Guided independent study: 276 hours					
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	Resubmission of coursework = 100%					
Module Co-ordinator:	Dr J D Mitchell					
Lecturer(s)/Tutor(s):	n/a					

Advanced Project in Mathematics / Statistics					
SCOTCAT Credits:	40	SCQF Level 11	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Available only to students in the final year of an MMath or MPhys Honours programme in the School				
Planned timetable:	To be arranged.				
This is a more substantial project will be chosen from some depth, submit a report	an approved list of	topics. The studer	it will be required		
Programme module type:	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.				
Pre-requisite(s):	Entry to an MPhys or MMath programme				
Learning and teaching methods and delivery:	Weekly contact: 1 week over whole		erage, 40 mins of pr	oject supervisions per	
	Scheduled learning	ng: 16 hours	Guided indeper	ndent study: 384 hour	
Assessment pattern:	As defined by QA	A:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%: Project = 80%, Presentation = 20%				
Re-Assessment pattern:	Resubmission of project = 100%				
Module Co-ordinator:	Prof C E Parnell				

### **School of Medicine**

### Medicine (MD) modules

MD3001 Medicine: Honours 1 (Cardiovascular and Respiratory Systems)							
	SCOTCAT Credits:	60 SCQF Level 9 Semester: 1					
	Academic year:	2016/7 & 2017/14					
	Availability restrictions:	Available only to students enrolled in the BSc Honours Medicine programme.					
	Planned timetable:	To be arranged.					

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.

MD3001 also provides system contextualised learning in the vertical themes of microbiology, public health and health psychology, as well as being part of the research skills matrix which prepares students for the critical review of published data and scientific writing.

Programme module type:	Compulsory for BSc Honours Medicine			
Pre-requisite(s):	MD2001 and MD2002			
Required for:	MD4001, MD4002, MD4003			
Learning and teaching methods and delivery:	Weekly contact: 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			
	Scheduled learning: 304 hours Guided independent study: 296 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 75%, Practical	Examinations = 0%, Coursework = 25%		
	As used by St Andrews:			
	Module Examinations will comprise 2 written examinations totaling 75% of the module grade.			
	Coursework will comprise a written examinations totaling 25% of the module grade.			
Re-Assessment pattern:	2 x 1.5-hour Written Examinations = 100%			
Module Co-ordinator:	Dr W Dhaliwal			

# MD3002 Medicine: Honours 2 (Reproductive, Renal and Gastrointestinal Systems) SCOTCAT Credits: 60 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/16 Availability restrictions: Available only to students enrolled in the BSc Honours Medicine programme. Planned timetable: To be arranged.

Medicine Honours 2 will: - provide in depth coverage of the structure and functions of the reproductive, renal and gastrointestinal systems - study the anatomy of the abdomen and pelvis 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 - integrate the ethical, moral and behavioural aspects relevant to these systems. MD3002 also provides system contextualised learning in the vertical themes of microbiology, public health and healthy psychology, as well as being part of the research skills matrix which prepares students for the critical review of the published data and scientific writing.

Programme module type:	Compulsory for BSc Honours Medicine			
Pre-requisite(s):	MD2001 and MD2002			
Required for:	MD4001, MD4002, MD4003			
Learning and teaching methods and delivery:	Weekly contact: 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.			
	Scheduled learning: 258 hours Guided independent study: 342 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	Module Examinations will comprise 2 written examinations totaling 75% of the module grade.			
	Attainment of competence in clinical skills appropriate to this stage of a medical curriculum as demonstrated in a pass/fail objective structured clinical exam (OSCE).			
	Coursework will comprise a written examination totaling 25% of the module grade.			
Re-Assessment pattern:	2 x 1.5-hour Written Examinations = 100%			
Module Co-ordinator:	Dr A Laidlaw			

# MD4001 Medicine: Honours 3 (Central Nervous System and Endocrine System) SCOTCAT Credits: 60 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/18 Availability restrictions: Available only to students enrolled in the BSc Honours Medicine programme. Planned timetable: To be arranged.

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 – consider the evidence base for medicine and develop critical appraisal skills.

Programme module type:	Compulsory for BSc Honours Medicine			
Pre-requisite(s):	MD3001 and MD3002			
Learning and teaching methods and delivery:	Weekly contact: 10 lectures and 6 hours of seminars/tutorials/practicals each week. Students typically spend two hours a week on clinical case studies and clinical skills, in addition to some whole day placements in clinical settings. Up to 6 hours per week of directed self-learning.			
	Scheduled learning: 304 hours Guided independent study: 296 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:  Module Examinations will comprise 2 written examinations totaling 75% of the module grade.  Coursework will comprise a written examination totaling 25% of the module			
Po Assassment nattorns	grade.			
Re-Assessment pattern:	2 x 1.5-hour Written Examinations = 100%			
Module Co-ordinator:	Dr R Davies, Dr P Reynolds			

02 Medicine: Honours 4 (Student-selected component)							
SCOTCAT Credits:	40	SCQF Level 10	Semester:	2			
Academic year:	2016/7 & 2017/20						
Availability restrictions:	Available only to students enrolled in the BSc Honours Medicine programme.						
Planned timetable:	To be arranged.						
Students will undertake and enable students to pursue a of the following: - lab/data review project assessed by d	n area of their own based research pro	particular interest ject assessed by o	at an advanced lev	vel. SSCs will involve one			
Programme module type:	Compulsory for BS	Sc Honours Medici	ne				
Pre-requisite(s):	MD3001 and MD3002						
Learning and teaching	Weekly contact: 1	o be arranged.					
methods and delivery:	Scheduled learning	ng: 5 hours	Guided indepe	ndent study: 395 hours			
Assessment pattern:	-	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews:  Lab/data based research or critical review project assessed by dissertation (100%) and oral presentation (0% of grade but which must be passed).						
Re-Assessment pattern:	re-assessment work: (dissertation if failed at original sitting; oral presentation if failed at original sitting) may be done over the summer months and submitted at the resit diet.						
Module Co-ordinator:	Prof L S Kent, Dr J	Tello					

### Medicine - Honours Level - 2016/7 - August 2016

**MD40** 

0	03 Medicine: Honours 5 (Applied Medical Science)						
	SCOTCAT Credits:	20 SCQF Level 10 Semester: 2					
	Academic year:	2016/7 & 2017/22					
	Availability restrictions:	Available only to students enrolled in the BSc Honours Medicine programme.					
	Planned timetable:	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. One cycle is dedicated to ward simulations where medical students work in multidisciplinary teams along with the nursing and pharmacy students from Dundee and Aberdeen.

Programme module type:	Compulsory for BSc Honours Medicine			
Pre-requisite(s):	MD3001 and MD3002			
Learning and teaching methods and delivery:	Weekly contact: 5 hours in 5 clinical cycles over the semester as well as some whole day placements in clinical settings.			
	Scheduled learning: 50 hours Guided independent study: 150 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 100%, Coursework = 0%			
	As used by St Andrews:			
	1 Objectively Structured Clinical Exam (OSCE) of 2 hours duration (100%)			
Re-Assessment pattern:	1 Objectively Structured Clinical Exam (OSCE) of 2 hours duration (100%)			
Module Co-ordinator:	Dr P Bjelogrlic, Dr E Sinclair			

### **School of Modern Languages**

Lecturer(s)/Tutor(s):

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	R3401 Media Arabic 1						
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1			
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8					
Planned timetable:	Wed 12.00 - 1.00	0 pm, Thu 12.00 - 1.0	00 pm				
the language of the Arabic training in comprehensio	media through texts and translation of	ne grammar and vocabulary learned during Sub-Honours by introducing students to media through texts, audio and audio-visual material. Students will be offered basic and translation of contemporary Media Arabic in both directions, and will also material and give oral presentations in Arabic.					
Programme module type:	Compulsory for A	Compulsory for Arabic					
Pre-requisite(s):	AR2001 and AR2	AR2001 and AR2002					
Learning and teaching methods and delivery:	Weekly contact: surgery hour	2 hours - mixture o	f lectures, seminars a	and tutorials and 1			
	Scheduled learn	ing: 30 hours	Guided indepen	dent study: 120 hours			
Assessment pattern:		As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%					
		As used by St Andrews: 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%					
Re-Assessment pattern:	3-hour Written E	3-hour Written Examination = 100%					
Module Co-ordinator:	Dr F Caiani						

AR3402 Media Arabic 2						
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	Wed 12.00 - 1.00 pm, Thu 12.00 - 1.00 pm				

Dr F Caiani

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.

Programme module type:	Compulsory for Arabic			
Pre-requisite(s):	AR2001 and AR2002, AR3401 or Study Abroad			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 hours - mixture of lectures, seminars and tutorials and 1 surgery hour.			
	Scheduled learning: 33 hours Guided independent study: 117 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr O Elmaz			
Lecturer(s)/Tutor(s):	Dr F Caiani, Dr O Elmaz			

### **AR3411 Modern Arab Culture and Society**

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	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
	Academic year:	2016/7				
	Planned timetable:	10.00 am Mon,	10.00 am Thu			

This module explores cultural aspects of the modern Arab world based on the works of some of the most influential Arab writers, intellectuals, critics, visual artists and filmmakers of the last two hundred years. The module is designed to improve and broaden students' knowledge of Arabic and the modern Arab world while also including a cultural component. Students will be required to read passages of Arabic texts from various genres and to watch films in Arabic (with subtitles). In-class discussions based on secondary readings in English will help provide an understanding of the cultural and socio-political dimensions of the contemporary Arab world. All presentations and written work will be in Arabic.

Programme module type:	Optional for Arabic		
Pre-requisite(s):	Permission of the Arabic Honours Adviser		
Learning and teaching methods and delivery:	Weekly contact: 2-hour seminar (x 9 weeks), 2 hours of film viewing (x 2 weeks) and 1 surgery hour.		
	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 40%, Coursework = 60%		
	As used by St Andrews:		
	15-minute Oral Examination = 40%, 0	Coursework = 60%	
Re-Assessment pattern:	15-minute Oral Examination = 100%		
Module Co-ordinator:	Dr O Elmaz		
Lecturer(s)/Tutor(s):	Dr O Elmaz		

### **AR3421 Arabic Short Stories 1**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	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.

Programme module type:	Optional for Arabic		
Pre-requisite(s):	Permission of the Arabic Honours Adviser		
Co-requisite(s):	AR3401		
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour.		
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practica	al Examinations = 0%, Coursework = 40%	
	As used by St Andrews:		
	2-hour Written Examination = 60%, C	Coursework = 40%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Ms C Cobham		
Lecturer(s)/Tutor(s):	Ms C Cobham		

### **AR3422 Arabic Short Stories 2**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Availability restrictions:	Availability restrictions:			
Planned timetable:	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.

Programme module type:	Optional for Arabic		
Pre-requisite(s):	AR2001, AR2002, AR3401 or study abroad in Semester 1		
Co-requisite(s):	AR3402		
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practic	al Examinations = 0%, Coursework = 40%	
	As used by St Andrews:		
	2-hour Written Examination = 60%, 0	Coursework = 40%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Ms C Cobham		
Lecturer(s)/Tutor(s):	Ms C Cobham		

### AR3461 Key Texts in Classical Arabic Literature and Culture 1

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	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.

Programme module type:	Optional for Arabic		
Pre-requisite(s):	Permission of the Arabic Honours Adviser		
Co-requisite(s):	AR3401		
Learning and teaching methods and delivery:	Weekly contact: 2 hours (lectures, seminars and tutorials) and 1 surgery hour.		
	Scheduled learning: 30 hours Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practica	al Examinations = 0%, Coursework = 40%	
	As used by St Andrews:		
	2-hour Written Examination = 60%, C	Coursework = 40%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr O Elmaz		
Lecturer(s)/Tutor(s):	Dr O Elmaz		

### AR3462 Key Texts in Classical Arabic Literature and Culture 2

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	2.00 pm Mon, 2				

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.

Programme module type:	Optional for Arabic		
Pre-requisite(s):	AR2001, AR2002, AR3401 or Study Abroad in Semester 1		
Co-requisite(s):	AR3402		
Learning and teaching methods and delivery:	Weekly contact: 2 hours (lectures, seminars and tutorials) and 1 surgery hour.		
	Scheduled learning: 33 hours Guided independent study: 117 hou		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practica	al Examinations = 0%, Coursework = 40%	
	As used by St Andrews:		
	2-hour Written Examination = 60%, C	Coursework = 40%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr O Elmaz		
Lecturer(s)/Tutor(s):	Dr O Elmaz		

### **AR4401 Advanced Arabic 1**

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•	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	3.00 or 4.00 pm Mon, 3.00 or 4.00 pm Thu (or 5.00 pm Thu in even we			Thu in even weeks)	

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.

Programme module type:	Compulsory for Arabic		
Pre-requisite(s):	AR2001, AR2002, AR3401, AR3402 or study abroad		
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour.		
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%  As used by St Andrews: 2-hour Written Examination = 60%, Practical (Oral Presentation) = 10%,		
	Coursework = 30%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Ms C Cobham		
Lecturer(s)/Tutor(s):	Ms C Cobham, Dr F Caiani, TBC, Mr M Whitehouse		

## AR4402 Advanced Arabic 2 SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 3.00 pm or 4.00 pm Mon, 3.00 pm or 4.00 pm Thu (or 5.00 pm Thu in even

weeks)

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.

Programme module type:	Compulsory for Arabic				
r rogramme module type.	Compaisory for Arabic				
Pre-requisite(s):	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad, AR4401				
Learning and teaching	Weekly contact: 2 hours and 1 surge	ry hour.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 10%, Coursework = 30%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Practical (Oral Presentation) = 10%, Coursework = 30%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Ms C Cobham				
Lecturer(s)/Tutor(s):	Ms C Cobham, Dr F Caiani, TBC, Mr N	1 Whitehouse			

### AR4421 Exile and Identity

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	2.00 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.

Programme module type:	Optional for Arabic			
Pre-requisite(s):	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad			
Co-requisite(s):	AR4401			
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, C	Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Ms C Cobham			
Lecturer(s)/Tutor(s):	Ms C Cobham			

### **AR4422 Novellas**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7				
Planned timetable:	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.

Programme module type:	Optional for Arabic				
Pre-requisite(s):	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad, AR4401				
Co-requisite(s):	AR4402				
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour				
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:  2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Ms C Cobham				
Lecturer(s)/Tutor(s):	Ms C Cobham				

### **AR4461 Classical Arabic Poetry**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	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.

Programme module type:	Optional for Arabic				
Pre-requisite(s):	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad				
Co-requisite(s):	AR4401				
Learning and teaching methods and delivery:	Weekly contact: 2 hours (lectures, seminars and tutorials) and 1 surgery hour.				
	Scheduled learning: 30 hours Guided independent study: 120 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr O Elmaz				
Lecturer(s)/Tutor(s):	Dr O Elmaz				

## AR4462 Classical Arabic Prose SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 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.

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Programme module type:	Optional for Arabic				
Pre-requisite(s):	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad, AR4401				
Co-requisite(s):	AR4402				
Learning and teaching methods and delivery:	Weekly contact: 2 hours (lectures, seminars and tutorials) and 1 surgery hour.				
	Scheduled learning: 33 hours Guided independent study: 117 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr O Elmaz				
Lecturer(s)/Tutor(s):	Dr O Elmaz				

AR4999

Dissentation in Aughin Chudina						
Dissertation in Arabic Studies						
SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year		
Academic year:	2016/7 & 2017/	2016/7 & 2017/8				
Availability restrictions:	Available only to students in the Final year of the Honours Programme.					
Planned timetable:	To be arranged.					
A dissertation of about 10,0 by an appropriate member of	,000 words on an approved topic in Arabic and Middle East Studies, supervised of staff.					
Programme module type:	Optional for Arabic					
Pre-requisite(s):	AR2001, AR2002, AR3401 or Study Abroad, AR3402 or Study Abroad					
Co-requisite(s):	AR4401, AR4402					
Learning and teaching methods and delivery:	•	: 3 x 1-hour semina al over the year.	rs and approximate	ly 8 contact hours with		
	Scheduled learn	ing: 11 hours	Guided indeper	ndent study: 289 hours		
Assessment pattern:	As defined by Q	AA:	•			
	Written Examina	ations = 0%, Practic	al Examinations = 0	%, Coursework = 100%		
	As used by St Aı	ndrews:				
	Dissertation = 100%					
Re-Assessment pattern:	Resubmission of	Dissertation				
Module Co-ordinator:	Ms C Cobham					
Lecturer(s)/Tutor(s):	As appropriate	As appropriate				

### Modern Languages - Honours Level - 2016/7 - December 2016 Comparative Literature (CO) modules

CO3001 Issues in Comparative Literature						
SCO	OTCAT Credits:	15	SCQF Level 9	Semester:	1	
Aca	ademic year:	2016/7 & 2017/8				
Pla	nned timetable:	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					

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.

Programme module type:	Compulsory for Comparative Literature				
Pre-requisite(s):	CO1001 or CO1002; CO2001 and CO2002				
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.				
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hour				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	Written Coursework = 100%				
Module Co-ordinator:	Dr E Finer				
Lecturer(s)/Tutor(s):	Team taught				

### **CO3002 Found in Translation**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged.				

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 (from 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.

Programme module type:	Compulsory for Comparative Literature		
Pre-requisite(s):	CO3001		
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.		
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: Take Home Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr E Bond		
Lecturer(s)/Tutor(s):	Team taught		

### CO3020 Cultural Memory and Literature

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

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 transnational perspective.

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Programme module type:	Optional for Comparative Literature			
Pre-requisite(s):	Permission of the Comparative Literature Honours Adviser.			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Written Coursework = 100%			
Module Co-ordinator:	Dr C Lawson			
Lecturer(s)/Tutor(s):	Team taught			

### **CO3021 Crossing the Mediterranean**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged			

The Mediterranean is often seen as a space which separates the cultures of the three continents which frame it but it is also regarded as a space of rich cultural exchange. This module explores a range of literary and film texts which foreground both the conflictual aspects of the divide, and the sense that the multicultural space of the Mediterranean offers a prism through which to understand the cultural diversity brought about by global mobility. All of the texts studied call into question familiar ideas about national cultures and belonging. The module looks at how culture crosses borders and how it is changed in the process. It looks at the effects of conflict and encounter on personal and cultural identities in transition.

Programme module type:	Optional for Comparative Literature			
Pre-requisite(s):	Permission of the Comparative Literature Honours Adviser.			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Written coursework = 100%			
Module Co-ordinator:	Prof D Duncan			
Lecturer(s)/Tutor(s):	Team taught			

### **CO4002 The Literary Canon**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	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?'

Programme module type:	Compulsory for Comparative Literature			
Pre-requisite(s):	CO3001, CO3002, CO4003			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Prof M-A Hutton			
Lecturer(s)/Tutor(s):	Team taught			

### **CO4003 Issues in Cultural Studies**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	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.

Programme module type:	Compulsory for Comparative Literature				
Pre-requisite(s):	CO3001, CO3002	Required for: CO4002			
Learning and teaching	Weekly contact: 1.5-hour seminar and 1 surgery hour.				
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 ho				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	Written Coursework = 100%				
Module Co-ordinator:	Dr S Talajooy				
Lecturer(s)/Tutor(s):	Team taught				

### **CO4021 Autobiography and the Visual Arts**

tare biography and the violativities					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

In recent decades, life-writing has taken a decidedly visual turn. The incorporation of visual arts (painting, photography and cinema) in autobiographical texts and films raises and redefines issues central to the genre: (how) can the self can be 'narrated'? What role do images play in the process of self-reflection? Other aspects discussed in this module will include the use of painting, photography, and cinema as metaphors of life writing; the merging of the public and private spheres in art; the creation of hybrid texts and art works and the question of innovation; the gendered aspects of these visual modes of writing the self. Texts studied may include travel diaries of painters; autobiographical films; hybrid autobiographical texts incorporating illustrations; autobiographical texts by women artists; texts reflecting on theory and practice of 'photo-biography'; artistic projects framing the self as art work. The module will focus primarily on works from the end of the nineteenth century until the present and will include collaboration with the School of Art History.

Programme module type:	Optional for Comparative Literature			
Pre-requisite(s):	Permission of the Comparative Literature Honours Adviser.			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr E Hugueny-Leger			
Lecturer(s)/Tutor(s):	Team taught			

### **CO4024 Performing Early-Modern Sexualities**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

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 Terze rime, Catalina Erauso's The Lieutenant Nun, The Transvestite Memoirs of the Abbé de Choisy, and John Lyly's Gallathea. Some theory will also be studied, including short excerpts from Butler, Foucault and Laqueur.

Programme module type:	Optional for Comparative Literature			
Pre-requisite(s):	Permission of the Comparative Literature Honours Adviser.			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.  Scheduled learning: 27 hours  Guided independent study: 123 ho			
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Written Coursework = 100%			
Module Co-ordinator:	Dr J Prest			
Lecturer(s)/Tutor(s):	Team taught			

### **CO4026 Classicism in European Literature**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	<del>2016/7</del> - not now running 2016/7				
Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for Comparative Literature			
Pre-requisite(s):	Permission of the Comparative Literature Honours Adviser.			
Learning and teaching	Weekly contact: 1.5-hour semina	r and 1 surgery hour.		
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hour			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Written Coursework = 100%			
Module Co-ordinator:	Dr M White			
Lecturer(s)/Tutor(s):	Dr M White, Dr T Bergman, Dr C Rossignoli			

### CO4028 Great Works and their Adaptations: Proust's Remebrance of Things Past

SCOTCAT Credits:	15	SCQF Level 10	Semester:	TBC
Academic year:	2017/8			
Planned timetable:	To be arranged.			

The module explores the relationship between Proust's Remembrance of Things Past (with particular emphasis on the first and final volumes, Swann's Way and Time Regained) and a range of its adaptations in, for instance, film, drama, the graphic novel, music and poetry. Various possible relationships between the original text and its adaptations will be examined, as will the definition and limits of the term itself: when, and why, might a reworking of a text no longer qualify as an 'adaptation'?

Programme module type:	Optional for Comparative Literature		
Pre-requisite(s):	Permission of the Comparative Literature Honours Adviser.		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 8 weeks), 1-hour seminar (x 8 weeks), 2.5-hour film/video viewing (x 2 weeks), surgery hour (x 12 weeks)		
	Scheduled learning: ee hours Guided independent study: 113 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:  Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Prof M-A Hutton		
Lecturer(s)/Tutor(s):	Prof M-A Hutton, Dr R MacKenzie, [	Dr E Laugt, Dr D Evans	

## CO4098 Short Dissertation in Comparative Literature SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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 no more than 5,000 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Comparative Literature		
Pre-requisite(s):	CO3001 and Permission of the Comparative Literature Honours Adviser.		
Anti-requisite(s):	a 30-credit dissertation in another subject		
Learning and teaching	Weekly contact: 3 seminars and 4 contact hours with supervisor  Scheduled learning: 7 hours  Guided independent study: 143 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Dissertation = 100%		
Re-Assessment pattern:	Resubmission of Dissertation		
Module Co-ordinator:	Dr E Finer		

### Modern Languages - Honours Level - 2016/7 - December 2016 French (FR) modules

SCOTCAT Credits: 15 SCQF Level 9 Semester: 1  Academic year: 2016/7 & 2017/8  Planned timetable: 11.00 am, 12.00 noon, 2.00 pm or 3.00 pm Mon  The module aims to give a fundamental training at Honours level in written and aural comprehension skills objective résumé 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.  Programme module type:  Pre-requisite(s): FR2022 or FR2032  Required for: FR3002 or equivalent Erasmus+ second semester abroad  Learning and teaching methods and delivery: Weekly contact: 2 hours and 1 surgery hour.  Scheduled learning: 30 hours Guided independent study: 120 hours	FR3001 French Language 1	l French Language 1				
Planned timetable:  11.00 am, 12.00 noon, 2.00 pm or 3.00 pm Mon  The module aims to give a fundamental training at Honours level in written and aural comprehension skills objective résumé 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.  Programme module type:  Pre-requisite(s):  FR2022 or FR2032  Required for:  FR3002 or equivalent Erasmus+ second semester abroad  Weekly contact: 2 hours and 1 surgery hour.	SCOTCAT Credits:	15	15 SCQF Level 9 Semester: 1			
The module aims to give a fundamental training at Honours level in written and aural comprehension skills objective résumé 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.  Programme module type:  Pre-requisite(s):  FR2022 or FR2032  Required for:  FR3002 or equivalent Erasmus+ second semester abroad  Weekly contact: 2 hours and 1 surgery hour.	Academic year:	2016/7 & 2017/8				
objective résumé 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.  Programme module type:  Compulsory for all degrees involving French  Pre-requisite(s):  FR2022 or FR2032  Required for:  FR3002 or equivalent Erasmus+ second semester abroad  Learning and teaching methods and delivery:  Weekly contact: 2 hours and 1 surgery hour.	Planned timetable:	11.00 am, 12.00 noon, 2.00 pm or 3.00 pm Mon				
type:  Pre-requisite(s): FR2022 or FR2032  Required for: FR3002 or equivalent Erasmus+ second semester abroad  Learning and teaching methods and delivery: Weekly contact: 2 hours and 1 surgery hour.	objective résumé writing,	oral and written fluency, and in translation from French to English. It is intended				
Required for:  FR3002 or equivalent Erasmus+ second semester abroad  Learning and teaching methods and delivery:  Weekly contact: 2 hours and 1 surgery hour.	_	Compulsory for all degrees involving French				
Learning and teaching Weekly contact: 2 hours and 1 surgery hour.	Pre-requisite(s):	FR2022 or FR2032				
methods and delivery:	Required for:	FR3002 or equivalent Erasmus+ second semester abroad				
methods and delivery: Scheduled learning: 30 hours Guided independent study: 120 hours		Weekly contact: 2	hours and 1 surge	y hour.		
	methods and delivery:	Scheduled learning: 30 hours Guided independent study: 120 hours				
Assessment pattern:  As defined by QAA:  Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%	Assessment pattern:	, ,			0%, Coursework = 20%	
As used by St Andrews:		As used by St Andrews:				
2-hour Written Examination = 60%, Coursework = 40%		2-hour Written Examination = 60%, Coursework = 40%				
<b>Re-Assessment pattern:</b> 3-hour Written Examination = 100%	Re-Assessment pattern:	3-hour Written Ex	amination = 100%			
Module Co-ordinator: TBC	Module Co-ordinator:	ТВС				

rench Language 2						
SCOTCAT Credits:	15	5 SCQF Level 9 <b>Semester:</b> 2				
Academic year:	2016/7 & 2017/8	016/7 & 2017/8				
Planned timetable:	11.00 am, 12.00 n	1.00 am, 12.00 noon, 2.00 pm or 3.00 pm Mon				
and aural comprehension English to French. It is inter a specific prerequisite for	skills, analytical resoluted as the basic page FR4105. This mo	dule aims to complete foundational training at Honours level, taking in written kills, analytical résumé writing, oral and written fluency, and translation from ded as the basic practical language unit for all categories of student and may be FR4105. This module may be replaced by Junior Honours second semester on. It may not be omitted for any other reason.				
Programme module type:	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.					
Pre-requisite(s):	FR3001					
Required for:	FR4105	FR4105				
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour.					
methods and delivery:	Scheduled learning	ng: 33 hours	Guided indepen	ndent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%					
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	3-hour Written Ex	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr J Prest					

FR3002

### FR3021 An Introduction to the French Classical Period **SCOTCAT Credits:** 15 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged. This module aims to give a general introduction to the broader concerns of the literature of seventeenthcentury France, looking at elements of development in the literary genres, while relating them to fundamental changes in the society of the time. Prescribed texts will be drawn from authors such as Corneille, Racine, Molière, Madame de la Fayette and La Fontaine. Optional for all MA degrees involving French Programme module type: Permission of the French Honours Adviser. Pre-requisite(s): Learning and teaching Weekly contact: 1.5 hours and 1 surgery hour. methods and delivery: Scheduled learning: 27 hours Guided independent study: 123 hours Assessment pattern: As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40% As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40% Re-Assessment pattern: 3-hour Written Examination = 100%

Dr J S O Carson

**Module Co-ordinator:** 

FR3063

De Gaulle and Since: To	ulle and Since: Topics in the Politics, Culture and Society of the Fifth Republic (1)					
SCOTCAT Credits:	15	2016/7				
Academic year:	2016/7					
Planned timetable:	To be arranged.					
video documents, the pol Major themes include: w	itics, culture and s rartime France (co	this module explores through literary texts, but also films, press extracts and ics, culture and society of the Fifth Republic instituted by Charles de Gaulle. rtime France (collaboration and resistance); the Algerian War; de Gaulle's tution of the Fifth Republic.				
Programme module type:	Optional for all MA degrees involving French					
Pre-requisite(s):	Permission of the French Honours Adviser.					
Co-requisite(s):	Related module: I	Related module: FR4164				
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.  Scheduled learning: 27 hours  Guided independent study: 123 hou					
methods and delivery:						
Assessment pattern:	As defined by QAA: Written Examinations = 20%, Practical Examinations = 20%, Coursework = 60%					
	As used by St Andrews:					
	2-hour Written Ex	camination = 60%,	Coursework = 40	0%		
Re-Assessment pattern:	3-hour Written Ex		6			
Module Co-ordinator:	Dr G Bowd	Dr G Bowd				

2016/7

### FR3077 Twenty-First-Century French Fiction SCOTCAT Credits: 15 SCQF Level 9 Semester: 2

Planned timetable: To be arranged.

Academic year:

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.

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Programme module type:	Optional for all MA degrees involving French			
Pre-requisite(s):	Permission of the French Honours Adviser.			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Prof M-A Hutton	Prof M-A Hutton		

### FR3078 Writing the Self in Twentieth- and Twenty-first Century French literature

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module explores critical theories relating to écriture de soi 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.

Programme module type:	Optional for all MA degrees involving French			
Pre-requisite(s):	Permission of the French Honours Adviser.			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 29 hours Guided independent study: 121 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr E Hugueny-Leger			

### FR3101 French Integrated Year Abroad

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SCOTCAT Credits:	60	SCQF Level 9	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	May be subject to restrictions from receiving country.				
Planned timetable:	Please Contact Department				

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. Formal learning and assessment will be through:

- (i) a supervised project of 5,000 words in French chosen in consultation with the module coordinator. Guided stages (unassessed) of the dissertation to be submitted at various specified points during the year, across both semesters. The dissertation to be submitted in May.
- (ii) a 10-minute oral exam in French to be sat upon the student's return to St Andrews after the WIYA year, during which the year abroad experience will be presented and discussed.

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Programme module type:	Compulsory for all degrees involving French with Integrated Year Abroad			
Pre-requisite(s):	Admission to Honours Programme with Integrated Year Abroad	Anti-requisite(s):	Erasmus Exchange	
Learning and teaching	This is a Study Abroad or External Placement module.			
methods and delivery:	Weekly contact: By correspondence throughout the year.			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr V Turner	Dr V Turner		

### FR4103 Translation Methodology 1

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Availability restrictions:	Available only to students in the Final year of the Honours Programme.				
Planned timetable:	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.

Programme module type:	Optional for all MA degrees involving French Related module: FR4104		
Pre-requisite(s):	FR3002 if taken, otherwise FR3001 or Erasmus+ year/semester abroad		
Required for:	FR4104		
Learning and teaching			
methods and delivery:	Scheduled learning: 27 hours	Guided independent study: 123 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr D Evans		

**Re-Assessment pattern:** 

**Module Co-ordinator:** 

**Module Co-ordinator:** 

### FR4104 Translation Methodology 2 **SCOTCAT Credits:** SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 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. Programme module Optional for all MA degrees involving French type: FR4103 Pre-requisite(s): Learning and teaching Weekly contact: 1.5 hours and 1 surgery hour. methods and delivery: Scheduled learning: 27 hours Guided independent study: 123 hours Assessment pattern: As defined by QAA:

3-hour Written Examination = 60%, Coursework = 40%

As used by St Andrews:

Dr D E Evans

Dr E Herdman

3-hour Written Examination = 100%

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

FR4105 Communication Skills in	French 1					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	To be arranged.					
based method designed b	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.					
Programme module type:	Compulsory for all degrees involving French					
Pre-requisite(s):	FR3002 if taken, otherwise FR3001 or Erasmus year/semester abroad.					
Required for:	FR4106					
Learning and teaching	Weekly contact: 2	hours and 1 surger	y hour.			
methods and delivery:	Scheduled learning	g: 30 hours	Guided indepen	dent study: 120 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%					
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	3-hour Written Examination = 100%					

### FR4106 Communication Skills in French 2 **SCOTCAT Credits:** SCQF Level 10 2 Semester: Academic year: 2016/7 & 2017/8 Planned timetable: 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. Programme module Compulsory for all degrees involving French type: Pre-requisite(s): FR4105 Learning and teaching Weekly contact: 2 hours and 1 surgery hour. methods and delivery: Scheduled learning: 33 hours Guided independent study: 117 hours Assessment pattern: As defined by QAA: Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40% As used by St Andrews: 2-hour Written Examination = 30%, Practical Examination = 30%, Coursework = 3-hour Written Examination = 100% Re-Assessment pattern: Dr E Herdman **Module Co-ordinator:**

FR4110 T	FR4110 Translating French Opera					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
	Academic year:	2016/7				
	Planned timetable:	To be arrranged.				

Du Roullet's libretto for Gluck's opera, Iphigénie en Aulide (1774), is based on Racine's tragedy, Iphigénie, written exactly 100 years earlier. Students will translate the libretto from (eighteenth-century) French to (gently modernised) English. 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. At the end of the module there will be a sung recital featuring our translations. Musical expertise is welcome but not essential.

Programme module type:	Optional for all degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching	Weekly contact: 2-hour seminar and 1 surgery hour.  Scheduled learning: 29 hours  Guided independent study: 121 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr J Prest		
Lecturer(s)/Tutor(s):	Dr J Prest		

### FR4111 Discovering the Renaissance: Imitation, Interpretation and Imagination SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7

Planned timetable: To be arranged.

The sixteenth century is a time of invention and discovery: it is a time of broadening horizons, both literally - following Columbus's discovery of the New World - and metaphorically, as the wide-scale dissemination of knowledge becomes possible through the new medium of print. Yet it is also a time of instability and conflict, marked by the "invention" of gunpowder and by the growing schism between Catholics and Protestants, culminating in the horrors of the French religious wars.

This module introduces students to a range of French Renaissance writers - from the seminal to the quirky - and examines how they respond to these shifting perspectives, which offer exciting intellectual and imaginative possibilities while casting serious doubt on ancient sources of knowledge and belief. The radical shift in literary authority that ensues encapsulates the humanism, scepticism and questions of identity that define the Renaissance.

Programme module type:	Optional for all MA degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.  Scheduled learning: 27 hours  Guided independent study: 123 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr E Herdman		
Lecturer(s)/Tutor(s):	Dr E Herdman		

### FR4115 Representations of the Renaissance: Sixteenth-century France in Historical Novels and Films

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	11.00 am Mon and 12.00 Thu, plus occasional film viewings at 5.00 pm Tue.				

What does it mean to refer to the sixteenth century as the French Renaissance? How has this conception – with its connotations of classical revival, of intellectual expansion and of individual identity – come about? How – and why – has this peculiarly privileged era been represented and reflected in literature and film over the ensuing centuries? And are such representations a fair reflection of this culturally rich but socially devastating period in France's history?

This module seeks to answer some of these questions by comparing the cultural history of sixteenth-century France with its representation in historical novels and films from the seventeenth century to the present day. It allows students to compare original source material with literary representations and adaptations into film and also to reflect on what the reception history of the Renaissance might teach us as much about later periods as about sixteenth-century France itself.

Programme module type:	Optional for all MA degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching	Weekly contact: Weekly seminars and fortnightly lectures and 1 surgery hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr E Herdman		
Lecturer(s)/Tutor(s):	Dr E Herdman	Dr E Herdman	

### FR4116 Mediaeval Marvels: The Exotic, the East and the Other in Mediaeval French Literature SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged.

Relations between the mediaeval Occident and Orient were highly complex during a period that saw violent crusades and interracial conflicts. Cases abound where notions of East and West merge and the East itself may even appear as no more than fantasy. Alongside the hideous monsters common to medieval epic, throughout the 12th-13th centuries there are many examples of fascination with the East that betray a desire to emulate its opulence as well as a fear of the foreign.

This module consequently aims to introduce students to a variety of literary representations of the mediaeval East and its residents, focussing above all on representations of cultural difference, the marvellous, and the exotic. The set texts give students the chance to engage with theoretical questions of otherness, fantasy and gender in relation to the specific historical period in question and to develop their ability to work critically with primary materials.

Programme module type:	Optional for all degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching	Weekly contact: 45-minute seminar, 45-minute lecture and 1 surgery hour.		
methods and delivery:	Scheduled learning: 27 hours	Guided independent study: 123 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr V Turner		
Lecturer(s)/Tutor(s):	Dr V Turner		

### FR4125 The French Age of Enlightenment SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for all MA degrees involving French				
Pre-requisite(s):	Permission of the French Honours Adviser.	Anti-requisite(s):	FR4122		
Learning and teaching methods and delivery:	Weekly contact: 1 lecture (x 9 weeks), 1 seminar (x 8 weeks), 1 surgery hour (x 11 weeks)				
	Scheduled learning: 28 hours Guided independent study: 122 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	Coursework = 100%				
Module Co-ordinator:	Dr M Ganofsky				
Lecturer(s)/Tutor(s):	Dr M Ganofsky				

### FR4126 Flaubert's France SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

This module focuses on the major works of Flaubert as prisms for understanding the ideological and aesthetic contexts of their times (1820-1870) and ours. Flaubert's exploration and representation of subjects including the taboo, and fictional transgressions of nineteenth-century literary norms make his works deeply relevant to investigating similar twenty-first-century issues and debates. Seminars explore texts in chronological order through a programme of prescribed passages for close reading, topics for class discussion and individual and group tasks involving engagement with secondary critical resources. One aim of the course is to ascertain what is transgressive and avant-garde in Flaubert's works. Another is to understand how literary works of the past can provide prescient insights into issues in contemporary France as a first-world culture. The overall structure of the course proactively facilitates textual/contextual analysis and synthesis as well as investigative learning.

Programme module type:	Optional for all MA degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching	Weekly contact: 1.5-hour seminar (x 11 weeks), 1 surgery hour (x 11 weeks)		
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 119 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:  2-hour Written Examination = 60%, Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof M Orr		
Lecturer(s)/Tutor(s):	Prof M Orr		

### FR4150 Creative Writing in French **SCOTCAT Credits:** SCQF Level 10 Semester: 2 Academic year: 2016/7 **Availability restrictions:** Module capped at 12 students

To be arranged.

Planned timetable:

This module allows students to develop and improve writing techniques in French and to build self-critical awareness on the writing process. The development of reading and writing skills will be supported by the study of various types of texts (which may include short stories, poetry, autobiography and fiction). Teaching and learning will be workshop-based, with the use of textual and visual stimuli to trigger imagination and inspiration. Students will be expected to share extracts from their work in progress and to engage with their own, and other students', written productions, to re-work and improve pieces.

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Programme module type:	Optional for all MA degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching methods and delivery:	Weekly contact: 2 hours of tutorials (x 11 weeks) 1 hour one-to-one supervision (x 11 weeks)		
	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Exa	aminations = 0%, Coursework = 100%	
	As used by St Andrews:		
	Coursework (3 pieces) = 100%		
Re-Assessment pattern:	A 2,500-word folder containing two creative writing pieces composed in French, accompanied by a reflective essay in English.		
Module Co-ordinator:	Dr Elise Hugueny-Leger		
Lecturer(s)/Tutor(s):	Team taught		

FR4164 D	FR4164 De Gaulle and Since: Topics in the Politics, Culture and Society of the Fifth Republic (2)				
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	To be arranged.			
	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.

Programme module type:	Related module: FR3063			
	Optional for all MA degrees involving French			
Pre-requisite(s):	Permission of the French Honours Adviser.			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 27 hours Guided independent study: 123 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr G P Bowd			

### FR4176 Recent Women's Writing in French: Theory and Practice SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7

Planned timetable: To be arranged.

What does it mean to write as a woman? What does it mean to write as a particular woman in a specific place, at a specific time? What, if anything, does the term 'women's writing' actually mean, and do we still need it? This module introduces students to some of the most important approaches to French feminist theory and literary studies since the publication of Simone de Beauvoir's Le Deuxième sexe in 1949. It then goes on to consider four novels by women writers publishing between the 1970s and the present, asking to what extent they can be read in terms of feminist theory, and how their representation of the social, cultural and artistic position of being a woman and a writer changes with the times.

Programme module type:	Optional for all MA degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture, 1-hour seminar and 1 surgery hour, plus occasional film/video viewing.		
	Scheduled learning: 27 hours Guided independent study: 123 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr K Jones		
Lecturer(s)/Tutor(s):	Dr K Jones		

### **FR4183 African Francophone Fiction**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

From Senegal to Rwanda, the former colonial language of French is spoken in 26 countries on the African continent. One of the important legacies of French and Belgian colonisation in Africa has been the emergence of African francophone literature. However, the African writer's relationship with the French language is a conflictual one, bound up with a history of colonial oppression. This module introduces students to fiction in French by writers from sub-Saharan Africa from the 1950s to the twenty-first century. Through the study of a selection of novels by major African authors, students will develop knowledge and understanding of the contexts of production of francophone African literature and the impact of colonisation on African literature in French, alongside a sophisticated analytical grasp of the literary works themselves.

Programme module type:	Optional for all MA degrees involving French		
Pre-requisite(s):	Permission of the French Honours Adviser.		
Learning and teaching methods and delivery:	Weekly contact: 1 lecture (x 11 weeks), 1 seminar (x 6 weeks), 1 surgery hour (x 11 weeks) and 2 hours of film/video viewing over the semester		
	Scheduled learning: 30 hours Guided independent study: 126 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof N M Hitchcott		
Lecturer(s)/Tutor(s):	Prof N M Hitchcott		

# FR4198 Dissertation on a French Topic SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Final year of the Honours Programme. Planned timetable: Please Contact Department

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 no more than 5,000 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for all MA degrees involving French			
Pre-requisite(s):	FR3002 if taken, otherwise FR3001 or Erasmus year/semester abroad.	An	ti-requisite(s):	FR4199 or a 30-credit dissertation in another subject
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 seminars and approximately 4 contact hours with the supervisor over the semester.			
	Scheduled learning: 7 hours Guided independent study: 143 hours			dent study: 143 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr G Bowd		•	

# FR4199 Long Dissertation on a French Topic SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Final year of the Honours Programme. Planned timetable: Please Contact Department

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for all MA degrees involving French			
Pre-requisite(s):	FR3002 if taken, otherwise FR3001 or Erasmus+ year/semester abroad.  Anti-requirements		ti-requisite(s):	FR4198, or a dissertation in another subject
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 seminars and approximately 8 contact hours with the supervisor over the year.			
	Scheduled learning: 11 hours Guided independent study: 289 ho		dent study: 289 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr G Bowd			

### German (GM) modules

### GM3005 German Language 1 SCOTCAT Credits: 15 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am Tue and Fri

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.

Programme module type:	Compulsory for all degrees involving German			
Pre-requisite(s):	Permission of the German Honours Adviser			
Learning and teaching	Weekly contact: 2 language classes and 1 surgery hour.			
methods and delivery:	methods and delivery: Scheduled learning: 33 hours Guided independent study: 1			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Frau K Mericka			
Lecturer(s)/Tutor(s):	Team taught			

### GM3006 German Language 2

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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 audiovisual materials in a range of registers and tasks including reading comprehension, discussion, written responses, and review of aspects of grammar.

Programme module type:	Compulsory for all degrees involving German		
Pre-requisite(s):	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.		
Learning and teaching	Weekly contact: 2 language classes a	and 1 surgery hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hou		
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%  As used by St Andrews: 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Frau K Mericka		
Lecturer(s)/Tutor(s):	Team taught		

### **GM3073** The Mediaeval Short Story

SCOTCAT Credits:	15 SCQF Level 9		Semester: 1	
Academic year:	2016/7 To be arranged.			
Planned timetable:				

The earliest German short stories, know as Maren, were funny tales about beautiful princesses, clever wives, stupid priests, wandering body parts, crossed-dressed knights, intrigue and mayhem. Using comedy, they explore some of the most problematic aspects of mediaeval culture, such as class, gender and religion. Long disregarded as popular culture, Maren have recently emerged as one of the most fascinating areas of mediaeval fiction. This module introduces students to the genre and some of its key topics.

Programme module type:	Optional for Single and Joint Honours German			
Pre-requisite(s):	Permission of the German Honours Adviser			
Learning and teaching	Weekly contact: 1.5 hour-seminar ar	nd 1 surgery hour.		
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr B Bildhauer			
Lecturer(s)/Tutor(s):	Dr B Bildhauer			

### **GM3075 Thomas Mann - Doktor Faustus**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2017/8			
Planned timetable:	To be arranged.			

This module affords students the chance to study a major novel of post-war Germany, Thomas Mann's Doktor Faustus, and through this novel to gain a larger knowledge of Mann's work as a whole. In a series of seminars students will be guided through their reading of the work. These reading seminars will be interspersed with lectures and seminars on key themes in Mann's oeuvre and life, from music to his political development. In addition to the main text, students will examine other genres (essays, letters) and gain broader insights into the historical situation of post-war Germany.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	· · · · · · · · · · · · · · · · · · ·		
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M White		
Lecturer(s)/Tutor(s):	ТВС		

### GM3080 Grammatical Rules and Lexical Exceptions in Modern German

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

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Programme module type:	Optional for Single and Joint Honours German				
Pre-requisite(s):	Permission of the German Honours Adviser	man Anti-requisite(s): LI3001, ML3201		LI3001, ML3201	
Learning and teaching	Weekly contact: 1.5 hours and 1 s	surg	ery hour.		
methods and delivery:	Scheduled learning: 28 hours Guided indepen		ndent study: 122 hours		
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr C Beedham				
Lecturer(s)/Tutor(s):	Dr C Beedham				

### **GM3081 Words and their Functions in Modern German**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2017/8			
Planned timetable:	2.00 pm Tue and Thu.			

This module focuses on vocabulary in modern German (in contrast to GM3080, which focuses on grammar), on words and their categorisation, structure and functions. We begin by looking at the functional (as opposed to structural) approach to language, which sees language as action and effects rather than as a static grammar + lexicon. We consider three approaches to the categorization of German vocabulary, i.e. the parts of speech: categorisation by syntax, by morphology, and by semantics. Two areas of language and politics are discussed: feminist linguistics, and Nukespeak. Finally, we examine word formation in German, covering compounds, prefixes, suffixes, conversion, and morphological transparency versus opacity.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching			
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C Beedham		
Lecturer(s)/Tutor(s):	Dr C Beedham		

### **GM3088 Travel Writing in German since 1990**

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	SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
	Academic year:	2016/7				
	Planned timetable:	To be arranged.				

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.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	Weekly contact: 1.5 hours and 1 sur	gery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr A Cusack		
Lecturer(s)/Tutor(s):	Dr A Cusack		

### **GM3091 The Nazi Past in German Cultural Memory**

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SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7 To be arranged.			
Planned timetable:				

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 *Vergangenheitsbewältigung* was, is and will be in the future.

Programme module type:	Optional for Single and Joint Honours German			
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Pre-requisite(s):	Permission of the German Honours Adviser			
Learning and teaching	rning and teaching hods and delivery:  Weekly contact: 1.5-hour seminar and 1 surgery hour.  Scheduled learning: 28 hours  Guided independent study: 12			
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr C Lawson			
Lecturer(s)/Tutor(s):	Dr C Lawson			

### GM3101 German Integrated Year Abroad SCOTCAT Credits: 60 SCQF Level 9 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: May be subject to restrictions from receiving country.

Please Contact Department

The objective of the module is language learning and cultural familiarisation through a work placement in a German-speaking country. Placements will be as Language Assistants in schools or on other assignments approved by the department.

Formal learning and assessment will be through:

Planned timetable:

- (i) a supervised project of 5,000 words in German chosen in consultation with the module co-ordinator. Guided stages (unassessed) of the dissertation to be submitted at various specified points during the year, across both semesters. The dissertation to be submitted in May.
- (ii) a 10-minute oral exam in German to be sat upon the student's return to St Andrews after the WIYA year, during which the year abroad experience will be presented and discussed.

Programme module type:	Compulsory for all degrees involving German with Integrated Year Abroad		
Pre-requisite(s):	Admission to the Honours Programme with Integrated Year Abroad and GM2002, GM2004, GM2008 or GM2010.	Anti-requisite(s):	GM3103 or Erasmus exchange.
Learning and teaching	This is a Study Abroad or External Placement module.		
methods and delivery:	Weekly contact: By correspondence throughout the year.		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr A Cusack		

## GM4007 Translation Methodology (German / English) SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 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.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	Weekly contact: 2 seminars and 1 surgery hour.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M White		
Lecturer(s)/Tutor(s):	Dr M White		

### **GM4046 Mediaeval Things**

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	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2		
	Academic year:	2016/7					
	Planned timetable:	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.

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Programme module type:	Optional for Single and Joint Honours German			
Pre-requisite(s):	Permission of the German Honours Adviser			
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr B Bildhauer			
Lecturer(s)/Tutor(s):	Dr B Bildhauer			

### GM4049 Language and Ideology in the GDR and West Germany from 1949 - 1989

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2017/8					
Planned timetable:	To be arranged.					

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.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100% TBC		
Module Co-ordinator:	Dr C Beedham		
Lecturer(s)/Tutor(s):	Dr C Beedham		

## GM4071 Shakespeare: The German Catalyst SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2017/8 Planned timetable: 12.00 noon Mon and 11.00 am Wed.

This module traces the unique story of Shakespeare's role in German literary and cultural life from the eighteenth to the twentieth century. Shakespeare is the external point of reference for Enlightenment debate, the iconoclastic example for irreverent "Stümer und Dränger". Through the mature criticism and translation of the Classical-Romantic age, Shakespeare achieved national status as a symbol of the German spirit and this role was secured in 1864 with the founding of the world's oldest Shakespeare Society – in Weimar! Students will follow this evolving reception through a range of genres, such as critical essays, plays, and German Shakespeare translations. Authors include Lessing, Goethe, Schiller, Schlegel and Fontane, among others.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	Weekly contact: 2 seminars and 1 surgery hour.		
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M White		
Lecturer(s)/Tutor(s):	Dr M White		

### **GM4072 German Classicism**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

Whether it is in authors like Goethe and Schiller, or works like *Iphigenie*, and *Maria Stuart*, or concepts like '*Bildung*', the cultural legacy of the short period of 'Weimar Classicism in Germany and Europe is undeniable and omnipresent. This module assesses the scope of this literary achievement and what lay behind it. The focus of the module will be on the close analysis of a range dramatic and poetic texts (such as *Tasso*, *Tell*, and Hölderlin's odes) studied in their intellectual and biographical contexts. In reading the 'classics' of German literature, we will be asking, what makes a 'classic'? Why did Germany feel it had to have a classical age at the end of the eighteenth-century? And what is specific about German Classicism in the context of other European 'Classicisms'?

Programme module type:	Optional for German					
Pre-requisite(s):	Permission of the German Honours Adviser	nan Anti-requisite(s):		CO4026		
Learning and teaching	Weekly contact: 18 seminars of 1	Weekly contact: 18 seminars of 1 hour, usually twice weekly.				
methods and delivery:	Scheduled learning: 18 hours		Guided independent study: 132 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	2-hour Written Examination = 100%					
Module Co-ordinator:	Dr M White					
Lecturer(s)/Tutor(s):	Dr M White					

### **GM4073 Women in German Letters**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2017/8			
Planned timetable:	To be arranged.			

Although today we take the participation of women in German letters for granted, the student of earlier periods cannot fail to observe that the pantheon of German literature contains few women. Yet women played a decisive part in constituting the field of German letters, as readers, authors, translators, critics and mediators. In this module students will encounter women writing in German who fulfil several of these roles. In the course of such encounters we shall address such issues as the historical canon, the accessibility of writing by women, and the influence of gender on literary work and the market for literature.

Programme module type:	Optional for German		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 or 2 hours of seminars per week and 2 practical classes over the semester and 1 surgery hour.		
	Scheduled learning: 18 hours Guided independent study: 132 hour		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr A Cusack		

### **GM4074 Mediaeval Film**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	Academic year: 2017/8					
Planned timetable:	To be arranged.					

The Middle Ages as an Other play a crucial role in our collective imagination of our modern history, identity and global politics. After an introduction to political and cultural medievalism in general, this course will focus on films set in the Middle Ages and adapting medieval texts and events, which deeply shape our knowledge of medieval history and culture. Covering topics as diverse as the crusades, Arabian Nights, papacy and courtly love, the films studied include some of the major milestones of the genre, and are investigated from the perspective of the German elements of their production and reception, and of their shared concern with fantasy, temporality, visuality/writing and individual vs. collective identity.

Programme module type:	Optional for German			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2-hour seminar (x 8 weeks), 1-hour lecture (x 1 week), 1-hour practical class (x 1 week), 2.5-hour film viewing (x 8 weeks), 1 office surgery hour (x 11 weeks)			
	Scheduled learning: 49 hours Guided independent study: 95 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr B Bildhauer			

### **GM4075 Berlin: Modernity and the Metropolis**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 To be arranged.			
Planned timetable:				

This module seeks to examine the particular role that Berlin has played in the development of German culture and politics (from late Wilhelmine Germany to its re-instatement as capital of a re-united Germany); to analyse the way in which the emblematic status of Berlin has been reflected in, and continues to exercise a decisive influence on, a variety of different art forms (including the novel, painting, cinema and architecture; to consider Berlin's dual role during the Cold War as a political and cultural capital on the border between East and West; to explore the concept of division - topographical, political, cultural and psychological - as reflected in Berlin and the texts it has inspired; to examine the relationship between past and present and the particular significance of cultures of memory in contemporary Berlin; and to determine the extent to which the city has managed to maintain a continuous identity in the face of repeated political upheaval.

Programme module type:	Optional for German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching methods and delivery:	Weekly contact: 2-hour seminar (x 7 weeks), 1-hour lecture (x 4 weeks), 1-hour film viewing (x 4 weeks), 1 office surgery hour (x 11 weeks)		
	Scheduled learning: 33 hours Guided independent study: 123 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Prof S Allan		

### **GM4084 Germany's Monsters**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2017/8			
Planned timetable:	To be arranged.			

This module examines the history of German fiction about monsters, with a focus on three key periods in German culture: the Middle Ages, Romanticism and Expressionism. It will enable students to use monstrosity, the uncanny, the undecidable and trauma as theoretical concepts; to determine the cultural functions of monsters; to explore the tensions that they embody; and to identify and reflect on changing and recurring fears and patterns in text and film over time.

Programme module type:	Optional for Single and Joint Honours German		
Learning and teaching methods and delivery:	Weekly contact: 1 or 2 hours of seminars per week and 2 practical classes over the semester and 1 surgery hour.		
	Scheduled learning: 27 hours Guided independent study: 123 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr B Bildhauer		

### **GM4092 East German Cinema**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2017/8			
Planned timetable:	To be arranged.			

The end of the GDR also saw the closure of the East German Film studios, DEFA, threatening its films with commercial oblivion. However, since reunification the many culturally and artistically significant films made under DEFA have increasingly attracted critical attention. This module will consider a number of these films spanning four decades in order to explore the way in which they navigate the political and censorial climate of the GDR and such issues as: East German cultural identity, the politics of the ordinary, the East German realist aesthetic, gender identities and feminism, the conflict between the individual and the state and the role of the artist in the GDR. We conclude the course by considering a film produced post reunification.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar and 1 surgery hour.		
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C Lawson		
Lecturer(s)/Tutor(s):	TBC		

### **GM4094 The German Long Story (1880 - 1941)**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

In the German nineteenth-century a class of prose fictions longer than short stories and shorter than novels enjoyed more critical and popular success than any other prose genre. Critics usually referred to these texts as novellas, harking back to an illustrious European tradition, and developing elaborate theories of what the novella was -- or, more importantly, of what it should be. This module will keep an open mind on the novella, putting the long stories themselves, rather than theories about them in the spotlight. What made these texts so popular, and so hotly debated by German critics? How does length influence the ways in which stories are composed, published, read and critiqued? In the module we will read six long stories from the period 1880 - 1941, attending to the ways in which these fictions tackle the themes of modernity.

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Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	Weekly contact: 2 seminars and 1 surgery hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr A Cusack		
Lecturer(s)/Tutor(s):	Dr A Cusack		

### GM4095 Rethinking German Realism 1845 - 1898

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Single and Joint Honours German		
Pre-requisite(s):	Permission of the German Honours Adviser		
Learning and teaching	Weekly contact: 1.5 hours and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hour		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr M White		
Lecturer(s)/Tutor(s):	Dr M White		

# GM4098 Dissertation on German Topic SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 or 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Final year of the Honours Programme. Planned timetable: Please Contact Department

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 no more than 5,000 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Single and Joint Honours German			
Pre-requisite(s):	Permission of the German Honours Adviser and Head of Department.	Anti-requisite(s):	GM4099 or a 30- credit dissertation in another subject	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 seminars and 4 contact hours with the supervisor in total over the semester.			
	Scheduled learning: 7 hours Guided independent study: 143 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr B Bildhauer			
Lecturer(s)/Tutor(s):	ТВС			

## GM4099 Long Dissertation on a German Topic SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Final year of the Honours Programme.

Please Contact Department

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Single and Joint Honours German			
Pre-requisite(s):	Permission of the German Honours Adviser and Head of Department	Anti-requisite(s):	GM4098 or a dissertation in another subject	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 seminars and 8 contact hours with the supervisor in total over the year.			
	Scheduled learning: 11 hours Guided independent study: 289 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr B Bildhauer			
Lecturer(s)/Tutor(s):	TBC			

### **GM4105 German Language 3**

Planned timetable:

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Compulsory for all degrees involving German		
Pre-requisite(s):	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.		
Learning and teaching	Weekly contact: 2 language classes and	d 1 surgery hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 50%, Coursework = 20%  As used by St Andrews:  1-hour Written Examination = 30%, Oral Examination = 30%, Coursework = 40%		
Re-Assessment pattern:	hour Written Examination = 100%		
Module Co-ordinator:	Dr A Cusack		
Lecturer(s)/Tutor(s):	Team taught		

## GM4106 German Language 4 SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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 analysing communication techniques and in employing them effectively in different situations.

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Programme module type:	Compulsory for Single Honours German. Normally compulsory for all other degrees involving German		
Pre-requisite(s):	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.		
Learning and teaching	Weekly contact: 2 language classes a	nd 1 surgery hour.	
methods and delivery:	methods and delivery: Scheduled learning: 33 hours Guide		
Assessment pattern:	As defined by QAA:  Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%  As used by St Andrews:  1-hour Essay in German Examination = 30%, Oral Examination = 30%, Coursework = 40%		
Re-Assessment pattern:	hour Written Examination = 100%		
Module Co-ordinator:	Frau K Mericka		
Lecturer(s)/Tutor(s):	Team taught		

### Italian (IT) modules

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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.

Programme module type:	Compulsory for all degrees involving Italian			
Pre-requisite(s):	IT2001 and a pass at 11 or better in IT2002			
Required for:	IT3002			
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 120 ho			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 25%, Coursework = 75%			
	As used by St Andrews:  Coursework = 100% (25% Oral test, 75% Continuous assessment)			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Ms S Triggiano			
Lecturer(s)/Tutor(s):	Ms S Triggiano			

### IT3002 Italian Language 2

•	anan Language 2					
	SCOTCAT Credits:	15	Semester:	2		
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	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.

Programme module type:	Compulsory for all degrees involving Italian			
Pre-requisite(s):	IT3001			
Required for:	IT4003			
Learning and teaching	•			
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA:  Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%			
	As used by St Andrews:  2-hour Written Examination = 30%, Practical Examination = 30%, Coursewor = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	ТВС			
Lecturer(s)/Tutor(s):	ТВС			

Module Co-ordinator:

Lecturer(s)/Tutor(s):

### **IT3022 Nineteenth-Century Literature SCOTCAT Credits:** SCQF Level 9 Semester: 1 Academic year: 2016/7 **Availability restrictions:** Availability to be confirmed closer to the time. Planned timetable: 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. Programme module type: Optional for all degrees involving Italian Pre-requisite(s): Permission of the Italian Honours Adviser. Learning and teaching Weekly contact: 1- or 2-hour seminar and 1 surgery hour. methods and delivery: Scheduled learning: 28 hours Guided independent study: 122 hours Assessment pattern: As defined by QAA: Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70% As used by St Andrews: Coursework = 100% Re-Assessment pattern: Coursework = 100%

IT3035 Italian Detective Fiction					
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
	Academic year:	2017/8			
	Planned timetable:	To be arranged.			

Dr C Rossignoli

Dr C Rossignoli

Detective stories are enormously popular in Italy but the genre has generally been regarded as primarily Anglo-Saxon. The prominence of a number of Italian crime writers in the 1990's prompted talk of a giallo nazionale and a reconsideration of the history of the genre dating Italian crime fiction back to the nineteenth century. This module studies the history of the detective novel in Italy, considers critical approaches to the genre, and examines the treatment of common features and themes by writers such as Leonardo Sciascia, Giorgio Scerbanenco, Umberto Eco, Carlo Lucarelli, Loriano Macchiavelli, and Andrea Camilleri.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching			
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr R Wilson		
Lecturer(s)/Tutor(s):	Dr R Wilson		

# IT3036 Venice SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 Availability restrictions: Availability to be confirmed closer to the time.

To be arranged.

Planned timetable:

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.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour semina	r and 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr R Riccobono		
Lecturer(s)/Tutor(s):	Dr R Riccobono		

IT3037 Contemporary Italian Woman Writers						
	SCOTCAT Credits: 15 SCQF Level 9 Semester: 1					
	Academic year:	2016/7				
	Availability restrictions:	Availability to be confirmed closer to the time.				
	Planned timetable:	To be arranged.				

Since the start of the twentieth century the role of women in Italy has undergone profound and rapid change. Women writers have reflected these changes in their fiction. This module explores the development of female identity, considers the ways in which women writers have responded to social, political and cultural changes, and examines common themes such as women's autobiography, the mother and daughter relationship, and the body, as treated by contemporary writers such as Anna Banti, Luisa Passerini, Clara Sereni, Elena Stancanelli.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour semin	ar and 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr R Riccobono		
Lecturer(s)/Tutor(s):	Dr R Riccobono		

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Primo Levi is probably the best-known and most-widely read Italian writer of the twentieth-century. Outside of Italy, Levi is seen as perhaps the major voice in Holocaust writing. He was the author of a rich body of work that was indelibly marked by his experience of Auschwitz, but also by his professional expertise as a scientist and by the secular Piedmontese Jewish tradition in which he grew up. This module will offer students an introduction to Levi's work focussing on his major thematic and ethical concerns and examining how he deals with them in different literary genres. The unit will look both at Levi's critical reception, but also at the response of one Italian film-maker to Levi's La tregua (1963) in which he recounts his journey back to Italy on his release from the concentration camp. The unit will give students a comprehensive introduction to the work of this major writer and the variety of genres in which he wrote. It will situate his work in the context of Holocaust memorial culture in Italy and elsewhere.

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Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1.5 hour seminar ar	nd 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews:  Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Prof D Duncan		
Lecturer(s)/Tutor(s):	Prof D Duncan		

IT3039 Emigrant Nation					
SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
Academic year:	2017/8				
Availability restrictions:	Availability to be confirmed closer to the time.				
Planned timetable:	To be arranged.				

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 Vita, Carmine Abate's II muro dei muri, and Laura Pariani's Quando dio ballava il tango, 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.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Learning and teaching methods and delivery:       Weekly contact: 1- or 2-hour seminar and surgery hour.         Scheduled learning: 28 hours       Guided independent study: 122 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Prof D Duncan		
Lecturer(s)/Tutor(s):	Prof D Duncan		

### **IT3101 Italian Integrated Year Abroad**

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SCOTCAT Credits:	60	SCQF Level 9	Semester:	Whole Year
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Students cannot take this module who are on an Erasmus Exchange			
Planned timetable:	To be arranged.			

The objective of the module is language learning and cultural familiarisation through a work placement in Italy. Placements will be as Language Assistants in schools or on other assignments approved by the department.

Formal learning and assessment will be through:

- (i) a supervised project of 5,000 words in Italian chosen in consultation with the module co-ordinator. Guided stages (unassessed) of the dissertation to be submitted at various specified points during the year, across both semesters. The dissertation to be submitted in May.
- (ii) a 10-minute oral exam in Italian to be sat upon the student's return to St Andrews after the WIYA year, during which the year abroad experience will be presented and discussed.

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Programme module type:	Compulsory for all degrees involving Italian with Integrated Year Abroad			
Pre-requisite(s):	Admission to the Honours Programme with Integrated Year Abroad	Anti-requisite(s):	IT3103 or Erasmus exchange in Italy.	
Learning and teaching	This is a Study Abroad or External	Placement module.		
methods and delivery:	Weekly contact: By correspondence throughout the year.Scheduled learning: 0 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80% As used by St Andrews:			
Coursework = 100%				
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Italian Study Abroad Coordinator			
Lecturer(s)/Tutor(s):	Italian Study Abroad Coordinator			

### IT4003 Communication Skills 1

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

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Programme module type:	Compulsory for all degrees involving Italian			
Pre-requisite(s):	IT3001, IT3002 or equivalent Study Abroad module			
Required for:	IT4004			
Learning and teaching	Weekly contact: 1 oral class, 1 written class and 1 surgery hour.			
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 120 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	As used by St Andrews:			
	Coursework = 100% (30% Oral, 70% Continuous assessment)			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr C Rossignoli			
Lecturer(s)/Tutor(s):	Dr C Rossignoli			

### IT4004 Communication Skills 2

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged	To be arranged.			

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.

Programme module type:	Compulsory for all degrees involving Italian		
Pre-requisite(s):	IT4003		
Learning and teaching	Weekly contact: 1 oral class, 1 writte	en class and 1 surgery hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 11		
Assessment pattern:	As defined by QAA: Written Examinations = 30%, Practical Examinations = 30%, Coursework = 40%		
	As used by St Andrews:  2.5-hour Written Examination = 30%, Practical Examination = 3 Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	TBC		
Lecturer(s)/Tutor(s):	TBC	·	

### **IT4010 Early Italian Lyric Poetry**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Availability restrictions:	Likely to be available - confirmation closer to the time.			
Planned timetable:	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.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour seminar and 1 surgery hour.  Scheduled learning: 28 hours  Guided independent study: 122 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr R Wilson		
Lecturer(s)/Tutor(s):	Dr R Wilson		

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To be arranged.

Planned timetable:

It is no exaggeration to say that, for a variety of reasons, Dante Alighieri is the single most important figure in the history of Italian literature. This module completes the study of Dante by looking at his work before and after the Inferno. Before the Inferno, Dante was best known as the author of the Vita nuova. This is our first text for study. Less read and more difficult, according to Dante himself, the Paradiso concludes the Commedia and is our other text for study. To complete our examination of Dante's ideas, reference will also be made to the Convivio, the Monarchia, and the De vulgari eloquentia, as well as to the Purgatorio and Inferno.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour semina	r and 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr R Wilson		
Lecturer(s)/Tutor(s):	Dr R Wilson		

IT4013 Modern Italy through Cinema					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
	Academic year:	2017/8			
	Planned timetable:	To be arranged.			

This module offers a perspective on historical as well as present views/conceptions of Italy, through the study of films by Italian directors such as: Luchino Visconti, Roberto Rossellini, Nanni Moretti and Gianni Amelio. There are about twenty screenings of selected cinematic texts in Italian with English subtitles. There is a greater in-depth analysis of between seven and nine films in classes. Students will be encouraged to develop their own critical approach through seminars and discussion. An element of Italian history will inform the module.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour semina	r and 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr R Riccobono		
Lecturer(s)/Tutor(s):	Dr R Riccobono		

### IT4014 Female Literary Representations in the Italian Renaissance

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2017/8			
Planned timetable:	To be arranged.			

The module will explore the problematic relationship of women and culture in the early modern period by focussing on changes in the representation of the female in Italian literature in the course of the sixteenth century. Renaissance notions of the female self will be examined from differing perspectives, from the idealised forms of Petrachism to the disenchanted reality of the courtesans. Key themes, such as the reinterpretation of mythological figures and the self-representation of female writers will be considered, as well as the work of writers such as Stampa, Fonte and Tullia d'Aragona.

Programme module type:	Optional for all Degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour seminar and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practica	al Examinations = 0%, Coursework = 40%	
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr C Rossignoli		
Lecturer(s)/Tutor(s):	Dr C Rossignoli		

### IT4026 Fascism and Film

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Availability restrictions:	Availability to be confirmed closer to the time.				
Planned timetable:	To be arranged.				

Mussolini famously declared that cinema was Fascism's most powerful weapon. Hi opponents often decried the propagandist quality of much of the film-making which took place under the regime. This module examines the Italian film industry between 1930 (the arrival of talkies in Italy) and 1943 (the fall of the regime). It will study the range of films produced under Fascism - comedies, melodrama, historical epics, documentary – to uncover the complexity of the links between Fascism and film.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour seminar and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Prof D Duncan		
Lecturer(s)/Tutor(s):	Prof D Duncan		

### | SCOTCAT Credits: 15 | SCQF Level 10 | Semester: 2 | | Academic year: 2017/8

Planned timetable: To be arranged.

This module looks at texts which deal with migration, postcolonial and transcultural issues ia a way of enriching, challenging and sometimes subverting national-bound ideas of cultural belonging and literary canons. This module will focus on narratives written by migrants and second generation authors (including Pap Khouma, Amara Lakhous, Ornela Vorpsi, Anilda Ibrahimi, Cristina Ali Farah and Igiaba Scego) and attempt to draw definitions of what is a new emerging genre of Italian literature.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour semina	r and 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr E Bond		
Lecturer(s)/Tutor(s):	Dr E Bond		

### **IT4028 The Twentieth-century Italian Novel**

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SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7				
Availability restrictions:	Availability to be confirmed closer to the time.				
Planned timetable:	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 subvertion 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, genre (the subversion of typical forms), experimentation, gender and queer narratives.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour semina	r and 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr E Bond		
Lecturer(s)/Tutor(s):	Dr E Bond		

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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 La difesa della razza 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.

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	Permission of the Italian Honours Adviser.		
Learning and teaching	Weekly contact: 1- or 2-hour semina	r, film viewing and 1 surgery hour.	
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Prof D Duncan		
Lecturer(s)/Tutor(s):	Prof D Duncan		

### IT4097 20-Credit Dissertation in Italian

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1 or 2
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Available only to students in the Final year of the Italian and Psychology Honours Programme.			
Planned timetable:	To be arranged.			

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 7,000 - 8,000 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Italian and Psychology		
Pre-requisite(s):	Entry into Joint Honours Degree in Italian and Psychology (with BPS recognition)		
Anti-requisite(s):	IT4098, IT4099 or dissertation in another subject.		
Learning and teaching	Weekly contact: To be arranged.		
methods and delivery:	Scheduled learning: 7 hours	Guided independent study: 193 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Dissertation = 100%		
Re-Assessment pattern:	Resubmission of Dissertation		
Module Co-ordinator:	Head of Italian Department		

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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 no more than 5,000 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	IT3001, IT3002 or equivalent Study Abroad module		
Anti-requisite(s):	IT4097, IT4099 or 30-credit dissertation in another subject		
Learning and teaching	Weekly contact: 3 seminars and 4 ho	ours with supervisor over the semester.	
methods and delivery:	nods and delivery: Scheduled learning: 7 hours Guided independent study		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical	Examinations = 0%, Coursework = 100%	
	As used by St Andrews:		
	Dissertation = 100%		
Re-Assessment pattern:	Resubmission of Dissertation		
Module Co-ordinator:	Head of Italian Department		

IT4099 Long Dissertation on an Italian Topic							
	SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year						
	Academic year:	2016/7 & 2017/8  Available only to students in the Final year of the Honours Programme.					
	Availability restrictions:						
	Planned timetable:	To be arranged.					

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for all degrees involving Italian		
Pre-requisite(s):	IT3001, IT3002 or equivalent Study A	broad module	
Anti-requisite(s):	IT4097, IT4098, or a dissertation in ar	nother subject	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 seminars and 8 contact hours with supervisor over the year.		
	Scheduled learning: 11 hours Guided independent study: 289 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Dissertation = 100%		
Re-Assessment pattern:	Resubmission of Dissertation		
Module Co-ordinator:	Head of Italian Department		

### Modern Languages - Honours Level - 2016/7 - December 2016 Modern Language (ML) modules

ML3101	ML3101 Modern Languages Integrated Year Abroad					
	SCOTCAT Credits:	60	SCQF Level 9	Semester:	Whole Year	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Available only to students registered for a WIYA degree				
	Planned timetable:	n/a				

The objective of the module is language learning and cultural familiarisation through a combination of work placements or periods of approved study spent successively in two countries where the languages in the student's Honours degree programme are spoken. The particular components of this type of integrated year abroad 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 the proposed pattern of residence and work/study abroad.

Formal learning and assessment will be through:

- (i) a supervised project of 5,000 words in one of the two target languages (4,000 words in Russian) chosen in consultation with the module co-ordinator. Guided stages (unassessed) of the dissertation to be submitted at various specified points during the year, across both semesters. The dissertation to be submitted in May.
- (ii) a 10-minute oral exam in the other of the two target languages to be sat upon the student's return to St Andrews after the WIYA year, during which the year abroad experience will be presented and discussed.

Programme module type:	Optional to any WIYA programme where a student spends time in more than one country.			
Pre-requisite(s):	Admission to Honours Programme with Integrated Year Abroad  Anti-requisite(s): Any other whole year study abroad module			
Learning and teaching	Weekly contact: By correspondence			
methods and delivery:	Scheduled learning: 0 hours	Guided indeper	endent study: 0 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews:  Coursework = 100% (Oral Examination = 20%, Dissertation = 80%)			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Various			

# ML4794 Joint Dissertation (30cr) SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/9 Availability restrictions: Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules. Planned timetable: To be arranged.

The dissertation must consist of approximately 10,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

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Programme module type:	Optional for Joint, Triple or 'with' Honours in the School of Modern Languages whenever allowed by departmental requirements.				
Pre-requisite(s):	A Letter of Agreement  Anti-requisite(s):  More than 30 cred in other dissertation / project modules				
Learning and teaching	Weekly contact: As per Letter of Agreement.				
methods and delivery:	Scheduled learning: hours	Guided independent	ndent study: hours		
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %				
	As used by St Andrews: As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				
Module Co-ordinator:	As per Letter of Agreement.				

### Modern Languages - Honours Level - 2016/7 - December 2016 Persian (PR) modules

### PR3001 Higher Intermediate Persian 1

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	1.00 pm Mon and 4.00 pm Thu			

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.

Programme module type:	Compulsory for Persian		
Pre-requisite(s):	PR2001, PR2002		
Required for:	PR3002		
Learning and teaching	Weekly contact: 2-hour seminar plus surgery hour.		
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Talajooy		
Lecturer(s)/Tutor(s):	Dr S Talajooy		

### PR3002 Higher Intermediate Persian 2

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	1.00 pm Mon and 4.00 pm Thu			

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.

Programme module type:	Compulsory for Persian		
Pre-requisite(s):	PR2001, PR2002, PR3001		
Learning and teaching			
methods and delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%		
	As used by St Andrews: 2-hour Written Examination = 40%, Oral Examination = 20%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Talajooy		
Lecturer(s)/Tutor(s):	Dr S Talajooy		

### **PR3020 Key Texts in Modern Persian Literature**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

Students will learn about key twentieth-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. The module is primarily designed to expose students to modern poetry and short stories and to improve and broaden students' knowledge of literary analysis in general and Persian literature and culture in particular. Students will be required to translate Persian poetry and prose passages into English and analyse them. This module will also address the sociopolitical contexts in which these literary works were produced.

Programme module type:	Optional for Persian			
Pre-requisite(s):	Permission of the Persian Honours Adviser			
Co-requisite(s):	PR3001			
Learning and teaching	Weekly contact: 2-hour seminar plus surgery hour.			
methods and delivery: Scheduled learning: 30 hours Guided independent study				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr S Talajooy			
Lecturer(s)/Tutor(s):	Dr S Talajooy			

### PR3021 Modern Iran through Cinema

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

Programme module type:	Optional for Persian			
Pre-requisite(s):	Honours entry into Persian, or otherwise with the permission of the Head of School			
Learning and teaching	Weekly contact: 2-hour seminar plus surgery hour.			
methods and delivery:	Very: Scheduled learning: 33 hours Guided independent study:			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr M Ghorbankarimi			
Lecturer(s)/Tutor(s):	Dr M Ghorbankarimi			

### **PR3022 Modernity and Iranian Drama**

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	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	To be arranged.			

Students study five Iranian plays by Hassan Moqaddam, Bahram Beyzaie, Mohammad Yaqubi, Abbas Na'lbandiyan, and Nghmeh Samini, selected to trigger discussions about, modernity and its pitfalls, resistance and cultural transformation, and the aesthetics of modern drama. The students will also translate some passages of the plays and discuss their performing potential. While the course is language-based, the module is designed to broaden students' knowledge of the history of Iranian modernity, and the aesthetic qualities and cultural functions of Iranian drama and its relationship with world drama. It will also provide them with the opportunity to improve their textual analysis and write critical pieces in Persian.

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Programme module type:	Optional for Persian		
Pre-requisite(s):	PR2001, PR2002		
Co-requisite(s):	PR3002		
Learning and teaching	Weekly contact: 2-hour lecture and 1	surgery hour	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 50%, C	oursework = 50%	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Talajooy		
Lecturer(s)/Tutor(s):	Dr S Talajooy		

### PR4001 Advanced Persian 1

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	4.00 pm Mon & 2.00 pm Thu			

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.

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Programme module type:	Compulsory for Persian			
Pre-requisite(s):	PR2001, PR2002, PR3001, PR3002			
Learning and teaching	Weekly contact: 2 hours and 1 surgery hour.			
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%  As used by St Andrews: 2-hour Written Examination = 40%, Oral Examination 20%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	Dr S Talajooy			
Lecturer(s)/Tutor(s):	Dr S Talajooy			

### PR4002 Advanced Persian 2

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	4.00 pm Mon & 2.00 pm Thu			

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.

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Programme module type:	: Compulsory for Persian		
Pre-requisite(s):	PR2001, PR2002, PR3001, PR3002, PR4001		
Learning and teaching	Weekly contact: 2 hours and 1 surge	ery hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Practical Examinations = 20%, Coursework = 40%  As used by St Andrews:		
	2-hour Written Examination = 40%, 0 40%	Oral Examination 20%, Coursework =	
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Talajooy		
Lecturer(s)/Tutor(s):	Dr S Talajooy		

### **PR4020 Introduction to Classical Persian Poetry**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 Entry to Persian honours programme			
Availability restrictions:				
Planned timetable:	To be arranged.			

This module will offer students the initial tools for reading classical Persian poetry and prose. It will provide the basic historical and analytical knowledge needed for the critical understanding of major genres and themes in classical Persian literature. It will also familiarize students with the literary schools instrumental in the development of the Persian literary heritage. Through the study of selected texts, students will learn about the figures of speech, poetic and prose structures and imagery common to classical Persian literary texts. They will also read brief biographies of several key figures in Persian classical literature and read and translate at least one sample work by each author.

Programme module type:	Optional for Persian		
Pre-requisite(s):	Permission of the Persian Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminar plus	surgery hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 409		
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr S Talajooy		
Lecturer(s)/Tutor(s):	Dr S Talajooy		

### **PR4021 Female Identity in Contemporary Iran**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	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.

Programme module type:	Optional for Persian		
Pre-requisite(s):	Honours entry into Persian, or otherwise with the permission of the Head of School		
Learning and teaching	Weekly contact: 2-hour seminar plus surgery hour.		
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%  Dr M Ghorbankarimi		
Module Co-ordinator:			
Lecturer(s)/Tutor(s):	Dr M Ghorbankarimi	·	

### **PR4098 Short Dissertation on a Persian Topic**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1 or 2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	To be arranged				

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. It should be no more than 5,000 words in length, be submitted in accordance with guidelines and deadlines, and normally be written in English.

Programme module type:	Optional for Persian		
Pre-requisite(s):	PR2001, PR2002, PR3001, PR3002		
Anti-requisite(s):	PR4099 or any 30-credit dissertation in another subject		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 seminars and 4 contact hours with supervisor over the semester.		
	Scheduled learning: 7 hours Guided independent study: 143 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Dissertation = 100%		
Re-Assessment pattern:	Resubmission of Dissertation		
Module Co-ordinator:	Dr S Talajooy		
Lecturer(s)/Tutor(s):	Dr S Talajooy		

## PR4099 Long Dissertation on a Persian Topic SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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 the dissertation is normally written in English.

Programme module type:	Optional for Persian			
Pre-requisite(s):	PR2001, PR2002, PR3001, PR3002			
Anti-requisite(s):	PR4099 or any 30-credit dissertation in another subject			
Learning and teaching methods and delivery:	Weekly contact: 3 seminars and 8 contact hours with supervisor over the year.			
	Scheduled learning: 11 hours Guided independent study: 289 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical	Examinations = 0%, Coursework = 100%		
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr S Talajooy	Dr S Talajooy		
Lecturer(s)/Tutor(s):	Dr S Talajooy			

### Modern Languages - Honours Level - 2016/7 - December 2016 Russian (RU) modules

### RU3001 Advanced Russian Language 1, Part 1 **SCOTCAT Credits:** SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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 (2016/7) or RU2202 or RU2204 (from 2017/8). 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. Programme module type: RU3001 or RU3005 is compulsory for all Russian degrees 2016/7: Pass at 11 or better in RU3005 Pre-requisite(s): Anti-requisite(s): RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109. Required for: RU3002 Learning and teaching Weekly contact: 2 language classes, 1 oral class and 1 surgery hour. methods and delivery: Scheduled learning: 44 hours **Guided independent study:** 106 hours Assessment pattern: As defined by QAA: Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25% As used by St Andrews: 2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25% 3-hour Written Examination = 100% Re-Assessment pattern: TBC Module Co-ordinator: RU3002 Advanced Russian Language 1, Part 2 **SCOTCAT Credits:** 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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. Programme module type: RU3002 or RU3110 is compulsory for all Russian degrees unless a semester abroad is taken Pre-requisite(s): RU3001 Anti-requisite(s): RU3110 Required for: RU4101

Scheduled learning: 44 hours

As defined by QAA:

As used by St Andrews:

**TBC** 

3-hour Written Examination = 100%

Weekly contact: 2 language classes, 1 oral class and 1 surgery hour.

Written Examinations = 60%, Practical Examinations = 15%, Coursework =

2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25%

Guided independent study: 106 hours

Learning and teaching

methods and delivery:

Assessment pattern:

Re-Assessment pattern:

Module Co-ordinator:

### **RU3005 Advanced Russian Translation 1**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
Academic year:	2016/7 & 2017/8				
Planned timetable:	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.

Programme module type:	RU3001 or RU3005 is compulsory for all Russian degrees, except Russian and a second language and a third subject				
Pre-requisite(s):	RU3101, RU3106 or ML3106 in Russia.  Anti-requisite(s): RU3001			RU3001	
Required for:	RU3110				
Learning and teaching	Weekly contact: 2 language classes, 1 oral class and 1 surgery hour.				
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 106 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%				
	As used by St Andrews:  2-hour Written Examination = 60%, Practical Examination = 15%, Coursework = 25%				
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	TBC				

### **RU3022 The Nineteenth-Century Russian Novel**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

The module is designed to build on the knowledge of Russian literature acquired at sub-honours level, and in particular to examine the genre of the novel as it developed in the nineteenth century. The most important writers of the period are studied, including works by Gogol, Turgenev, Dostoevsky and Tolstoy. Historical and literary context is provided through consideration of the Slavophile / Westerniser debate and literary realism.

Programme module type:	Optional for all degrees involving Russian		
Pre-requisite(s):	Permission of the Russian Honours Adviser.		
Learning and teaching	Weekly contact: 2 seminars and 1 surgery hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:  Coursework = 100% (2 essays of 3000 words each)		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr C Whitehead		
Lecturer(s)/Tutor(s):	Dr C Whitehead		

### **RU3101 Russian Integrated Year Abroad**

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SCOTCAT Credits:	60	SCQF Level 9	Semester:	Whole Year
Academic year:	2016/7 & 2017/8			
Availability restrictions:	May be subject to restrictions from receiving country.			
Planned timetable:	Please Contact Department			

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 will be through:

- (i) a supervised project of 4,000 words in Russian chosen in consultation with the module co-ordinator. Guided stages (unassessed) of the dissertation to be submitted at various specified points during the year, across both semesters. The dissertation to be submitted in May.
- (ii) a 10-minute oral exam in Russian to be sat upon the student's return to St Andrews after the WIYA year, during which the year abroad experience will be presented and discussed.

Programme module type:	Compulsory for all degrees involving Russian with Integrated Year Abroad			
Pre-requisite(s):	Admission to the Honours Programme with Integrated Year Abroad, Pass at 11 or better in RU2002, RU2004, RU2006, RU2106, RU2107, or RU2109.			
Anti-requisite(s):	RU3102 or Erasmus exchange.	Required for:	RU3005	
Learning and teaching	This is a Study Abroad or External P	lacement module.		
methods and delivery:	Weekly contact: By correspondence throughout the year.			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	TBC			
Lecturer(s)/Tutor(s):	TBC			

### **RU3102 Semester of Study in Russia**

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SCC	OTCAT Credits:	60	SCQF Level 9	Semester:	2
Aca	ademic year:	2016/7 & 2017/8			
Pla	nned timetable:	Please Contact D	epartment		

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Compulsory for all degrees involving Russian with an approved semester abroad			
Pre-requisite(s):	RU3001	Anti-requisite(s):	RU3101, RU3103	
Required for:	RU4101			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : up to 20 hours depending on agreement with Russian institution.			
	Scheduled learning: 0 hours Guided independent study: 0 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 25%, Practical Examinations = 0%, Coursework = 75%			
	As used by St Andrews:			
	2-hour Written Examination = 25%, Dissertation in Russian = 50%, Coursework = 25%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	TBC			

### **RU3110 Advanced Russian Translation 2**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	To be arranged.			

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.

Programme module type:	RU3002 or RU3110 is compulsory for all Russian degrees unless a semester abroad is taken			
Pre-requisite(s):	RU3005	5 Anti-requisite(s): RU3002		
Required for:	RU4101			
Learning and teaching	Weekly contact: 2 language classes, 1 oral class and 1 surgery hour.			
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 106 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%			
	As used by St Andrews: 2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	ТВС			

### **RU4101 Advanced Russian Language 2**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Compulsory for all degrees involving Russian		
Pre-requisite(s):	RU3002 or RU3102 or RU3110		
Required for:	RU4102, RU4104		
Learning and teaching	Weekly contact: 1 language class, 1 oral class and 1 surgery hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 15%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Practical Test = 15%, Coursework = 25%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	ТВС		

### **RU4102 Advanced Russian Oral Skills**

SCOTCAT Credits:	0	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	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.

Programme module type:	Optional for all degrees involving Russian				
Pre-requisite(s):	RU4101	Anti-requisite(s):		RU4104	
Learning and teaching	Weekly contact: 1-hour oral class.				
methods and delivery:	Scheduled learning: 11 hours		Guided indepen	ndent study: 0 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 100%, Coursework = 0%				
	As used by St Andrews:				
	20-minute Practical Oral Examination = 100%				
Re-Assessment pattern:	none - class for zero credits				
Module Co-ordinator:	TBC				

### **RU4104 Russian Communication Skills**

Aussian Communication Skins				
SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Compulsory for all degrees involving Russian, except Three-Subject degrees			
Pre-requisite(s):	RU4101	An	nti-requisite(s):	RU4102
Learning and teaching methods and delivery:	Weekly contact: 1-hour oral class, 1 surgery hour, 1-hour video class or written work.			
	Scheduled learning: 33 hours Guided independent study: 117 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 60%, Coursework = 40%			
	As used by St Andrews:  20-minute Oral Examination = 40%, Audio-visual Examination = 20%, Coursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%			
Module Co-ordinator:	TBC			

## RU4131 Russian 'Village Prose': 1953 - 1980 SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for Russian		
Pre-requisite(s):	Permission of the Russian Honours Adviser.		
Learning and teaching methods and delivery:	Weekly contact: 2 seminars and occasional film/video viewing, and 1 surgery hour.		
	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr V Donovan		

RU4133 Russian Children's Literature (1900 - 2015)					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	To be arranged.			

Children's books are shaped by the pedagogical and political concerns of adults; as such, they are an excellent introduction to Russian twentieth and twenty-first century cultural policy. We will explore how children's literature mirrors society and aims to influence it. Three main thematic areas will be studied: socially-responsible literature; criminality and reform; classics and curricula. The module will involve close reading and the study of institutions that shape the canon: publishers, schools, censors, libraries, journals, the market, the state, the church, and the Internet. In addition to reading the selected texts, students will research their own material online by reading and presenting on magazines and journals published by the Russian State Children's Library Archive.

Programme module type:	Optional for Russian			
Pre-requisite(s):	Permission of the Russian Honours Adviser.			
Learning and teaching methods and delivery:	Weekly contact: 1.5-hour seminar (x 10 weeks) and 1 surgery hour (x 10 weeks)			
	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr E Finer			

### **RU4143 Gender in Russian Literature and Culture**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module is designed to build on the knowledge of Russian literature and culture acquired at subhonours level, focusing in particular on issues of gender. Some of the most important writers of the nineteenth, twentieth and twenty-first centuries will be studied (such as Ivan Turgenev, Nikolay Chernyshevsky, Isaac Babel, Vladimir Mayakovsky, Mikhail Bulgakov, Alexandr Solzhenitsyn), alongside women writers, more recently added to the canon (this may include works by Karolina Pavlova, Nadezhda Durova, Anna Akhmatova, Lyudmila Petrushevskaya). The module will explore how culturally specific Russian instantiations of ideas about femininity, masculinity and queerness interact with Western theories of gender and sexuality'. Focusing on both traditional and subversive representations of gender, students will examine their development from the mid-nineteenth century to present day. Independent reading and study will form a major element of the module.

Programme module type:	Optional for all degrees involving Russian		
Pre-requisite(s):	Permission of the Russian Honours Adviser.		
Learning and teaching methods and delivery:	Weekly contact: 1.5-hour seminar (x 11 weeks) and 1 surgery hour (x 11 weeks)		
	Scheduled learning: 28 hours Guided independent study: 119 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr M Vaysman		

### **RU4144 Russian Crime Fiction**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7			
Planned timetable:	To be arranged.			

Russian crime fiction is a hugely popular genre with the contemporary reading public and yet one which remains relatively critically neglected. This module provides students with the opportunity to study the history of the practice of crime fiction in Russia from c.1860 up to the present day. Students will consider the specific socio-historical context of the birth of the genre in the reform period of the early 1860s, as well as issues of 'high' and 'low' aesthetic genres, before moving on to read a broad range of such works. Discussion throughout will focus on both the literary poetics of the works as well as their relationship to historical situation and debate. Authors to be studied include: Sokolovskii, Panov, Dostoevskii, Shkliarevskii, Chekhov, Sokolova, Shaginian and Akunin.

Programme module type:	Optional for all degrees involving Russian		
Learning and teaching	Weekly contact: 2 seminars and 1 surgery hour.		
methods and delivery:	ethods and delivery:  Scheduled learning: 33 hours  Guided independent study: 11		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%		
	As used by St Andrews:		
	Practical Oral Examination = 30%, Coursework = 70%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr C Whitehead		

## RU4151 The City in Soviet and Russian Cinema SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

The history of Soviet cinema and the modern Soviet city are inextricably intertwined. From the very inception of the Communist state, the rapidly changing urban environment became a focus for cinematic reflection. Conversely, cinema played a fundamental role in forming urban identities through both the projection of an ideal of city life to communities and the collective experience of spectatorship. This module engages with representations of the city in Soviet and post-Soviet cinema as a utopian or dystopian space, a place of revolution, social transformation, warfare, invention, criminality, poverty, and memory. It looks at the ways the city has been understood and portrayed in Soviet cinema, from the use of mise-en-scène, montage, and editing, to dialogue, soundtracks and documentary recordings. The syllabus will include works by prominent Soviet and post-Soviet directors including Sergei Eisenstein, Vladimir Menshov, Aleksei Balabanov, and Valeriia Gai Germanika.

Programme module type:	Optional for all degrees involving Russian				
Pre-requisite(s):	Permission of the Russian Honours Adviser.				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1.5-hour seminars and 1 surgery hour, plus film/video viewing.				
	Scheduled learning: 28 hours	Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	Coursework = 100%				
Module Co-ordinator:	Dr V Donovan				
Lecturer(s)/Tutor(s):	Dr V Donovan				

RU4198 Dissertation on a Russian Topic						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1 or 2	
	Academic year:	2016/7 & 2017/8  Available only to students in the Final year of the Honours Programme.				
	Availability restrictions:					
	Planned timetable:	Please Contact Department				

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 no more than 5,000 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for all degrees involving Russian			
Pre-requisite(s):	Permission of the Russian Honours Adviser.			
Anti-requisite(s):	RU4199 or a 30-credit dissertation in another subject			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 4 contact hours with the supervisor plus 3 seminars over the semester.			
	Scheduled learning: 7 hours	Guided independent study: 143 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr E Finer			

# RU4199 Long Dissertation a Russian Topic SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year

Academic year: 2016/7 & 2017/8

Availability restrictions: Available only to students in the Final year of the Honours Programme.

Planned timetable: Please Contact Department

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for all degrees involving Russian			
Pre-requisite(s):	Permission of the Russian Honours Adviser.			
Anti-requisite(s):	RU4198 or a dissertation in another s	RU4198 or a dissertation in another subject		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 8 contact hours with the supervisor plus 3 seminars over the year.			
	Scheduled learning: 11 hours Guided independent study: 289 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr E Finer			

# Spanish (SP) modules

# SP3001 Spanish Language 1 SCOTCAT Credits: 15 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

Programme module type:	Compulsory for all degrees involving Spanish		
Pre-requisite(s):	Pass with an average of grade 11 or better in all SP modules taken.		
Required for:	SP3002		
Learning and teaching	Weekly contact: 1 class, 1 practical and 1 surgery hour.		
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr J Letrán		

SP3002 S	SP3002 Spanish Language 2				
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	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.)

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Programme module type:	Compulsory for all degrees involving Spanish		
Pre-requisite(s):	SP3001		
Required for:	SP4003, SP4102		
Learning and teaching	Weekly contact: 1 class, 1 practical and 1 surgery hour.		
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Dr J Letrán		

# **SP3006 Literary Translation**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1 & 2 (taught twice)
Academic year:	2016/7 & 2017/8			
Planned timetable:	9.00 am - 10.30 am Wed			

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.

Programme module type:	Optional for all degrees involving Spanish, once compulsory modules have been taken.		
Pre-requisite(s):	Permission of the Spanish Honours Adviser		
Co-requisite(s):	Compulsory modules for Single and Major Spanish programmes		
Learning and teaching	Weekly contact: 1 (x 1.5-hour) seminar and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%		
Module Co-ordinator:	Prof G San Román		
Lecturer(s)/Tutor(s):	Prof G San Román and Dr C O'Leary		

# **SP3011 History of the Spanish Language**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2017/8			
Planned timetable:	2.00 pm - 3.30 pm Fri			

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.

Programme module type:	Optional for a degrees involving Spanish, once compulsory modules have been taken.		
Pre-requisite(s):	Permission of the Spanish Honours Adviser		
Co-requisite(s):	Compulsory modules for Single and Major Spanish programmes		
Learning and teaching	Weekly contact: 1 (x 1.5-hour) seminar and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Written Coursework = 100%		
Module Co-ordinator:	Dr K Anipa		

# **SP3101 Spanish Integrated Year Abroad**

panish integrated real Abroad				
SCOTCAT Credits:	60	SCQF Level 9	Semester:	Whole Year
Academic year:	2016/7 & 2017/8			
Availability restrictions:	May be subject to restrictions from receiving country.			
Planned timetable:	Please Contact Department			

The objective of the module is language learning and cultural familiarisation through a work placement in a Spanish-speaking country. Placements will be as Language Assistants in schools or on other assignments approved by the department.

Formal learning and assessment will be through:

- (i) a supervised project of 5,000 words in Spanish chosen in consultation with the module co-ordinator. Guided stages (unassessed) of the dissertation to be submitted at various specified points during the year, across both semesters. The dissertation to be submitted in May.
- (ii) a 10-minute oral exam in Spanish to be sat upon the student's return to St Andrews after the WIYA year, during which the year abroad experience will be presented and discussed.

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Programme module type:	Compulsory for all degrees involving Spanish with Integrated Year Abroad			
Pre-requisite(s):	SP2002. Admission to the Honours Programme with Integrated Year Abroad.			
Anti-requisite(s):	SP4102 or Erasmus exchange.			
Learning and teaching	This is a Study Abroad or External Placement module.			
methods and delivery:	Weekly contact: By correspondence throughout the year.			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	TBC			

# SP3121 Spanish American Literature I (Gauchos and Indians)

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2017/8			
Planned timetable:	9:30 am - 11:00 am Wed			

The aim of the module is to study a selection of Spanish American 'Americanist' texts. These are works which are self-consciously Latin American in their depiction of historical or cultural aspects of the continent. The selection is likely to include works dealing with one or more of the following topics: gauchos, Indians, rural Latin America. Three or four texts are studied from a list including Hidalgo's poetry, Facundo, Don Segundo Sombra, Los rmos profundos, Amalia, Doqa Barbara and the rural short story in the River Plate. Apart from general and historical introductions, the course proceeds on the basis of seminar papers given by students.

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Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken			
Pre-requisite(s):	Permission of the Spanish Honours Adviser.			
Co-requisite(s):	Compulsory modules for Single and N	Compulsory modules for Single and Major Spanish programmes		
Learning and teaching	Weekly contact: 1 x 1.5-hour seminar and 1 surgery hour.			
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Written Coursework = 100%			
Module Co-ordinator:	Prof G San Roman			
Lecturer(s)/Tutor(s):	Prof G San Roman			

#### SP3122 Spanish American Literature 2

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	9.00 am - 10.30 am Wed			

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.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken, except Minor 'with Spanish' degrees			
Pre-requisite(s):	Permission of the Spanish Honours Adviser			
Co-requisite(s):	Compulsory modules for Single and N	Major Spanish programmes		
Learning and teaching	Weekly contact: 1 x 1.5-hour semina	r and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hour			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Written Coursework = 100%			
Module Co-ordinator:	Prof G San Roman			
Lecturer(s)/Tutor(s):	Prof G San Roman			

# **SP3138 Mexico in the Nineteenth Century**

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SCOTCAT Credits:	15	SCQF Level 9	Semester:	1
Academic year:	2016/7 & 2017/8			
Planned timetable:	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.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.			
Pre-requisite(s):	Permission of the Spanish Honours Adviser.			
Learning and teaching	Weekly contact: 1 x 1.5-hour seminar and 1 surgery hour.  Scheduled learning: 28 hours  Guided independent study: 122 hours			
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Prof W M Fowler			

## SP3145 Post-1975 Writing in Spain 1

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SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
Academic year:	2017/8	2017/8			
Planned timetable:	3.00 pm - 4.3	3.00 pm - 4.30 pmTue			

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.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.		
Pre-requisite(s):	Permission of the Spanish Honours Adv	viser.	
Co-requisite(s):	Compulsory modules for Single and Major Spanish programmes		
Learning and teaching	Weekly contact: Seminar and surgery hour.		
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr J Letran		

# SP3147 The Art of Subversion in Post-War Spain (1939-1975)

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	11.00 am- 12.30 pm Wednesday.			

This module is designed to introduce students to the complex and fascinating relations between culture and history within the context of post-Civil War Spain, providing them with an interdisciplinary knowledge of that period. In particular, it aims at exploring the value of film and poetry as modes of cultural resistance to dominant political and ideological discourses. In order to do so, we will be looking at the work of a number of key authors in the history of contemporary Spanish literature (such as José Hierro, Ángel Gonzalez, Gloria Fuertes, Jaime Gil de Biedma, and José Ángel Valente, amongst others) and cinema (typically, L. García Berlanga, J. A. Bardem, B. Martín Patino, V. Erice, C. Saura, etc).

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.		
Pre-requisite(s):	Permission of the Spanish Honours Adviser.		
Co-requisite(s):	Compulsory modules for Single and Ma	ajor Spanish programmes	
Learning and teaching	Weekly contact: 1-hour seminar and 1	surgery hour.	
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical E	xaminations = 0%, Coursework = 100%	
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr J Letrán		
Lecturer(s)/Tutor(s):	Dr J Letrán		

## SP3148 The Argentine and Chilean Avant-Garde (1920s-1930s)

•	The Argentine and Cimean Avant-Garde (15203-15303)					
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	TBC	
	Academic year:	2017/8				
	Planned timetable:	To be arranged.				

This module is designed to introduce students to the Argentine and Chilean avant-garde poetry of the interwar period through the work of three internationally acclaimed authors: Jorge Luis Borges (Fervor de Buenos Aires, 1923), Oliverio Girondo (Veinte poemas para ser leídos en el tranvía, 1922) and Vicente Huidobro (Altazor, 1931). Its aim is to examine the literary modernisms of Chile and Argentina, probing issues of cultural nationalism, 'Latin Americanness', aesthetic syncretism and urban space.

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Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken		
Pre-requisite(s):	Permission of the Spanish Honours Adviser.		
Co-requisite(s):	Compulsory modules for Single and Major Spanish programmes		
Learning and teaching	Weekly contact: 1 Seminar and 1 sur	gery hour.	
methods and delivery:	Scheduled learning: 26 hours Guided independent study: 124 ho		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical	Examinations = 0%, Coursework = 100%	
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr E Kefala		
Lecturer(s)/Tutor(s):	Dr E Kefala		

# **SP3157 Autobiographical Writing in Twentieth-Century Spain**

SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2017/8			
Planned timetable:	11.00 am - 12.30 pm Wed			

In this module the exploration of autobiographical writing in contemporary Spain has multiple objectives. It will provide an introduction to the problems and characteristics of autobiographical writing as an important literary genre. These theoretical tools will be applied to a problematic and ambiguous example (Lazarillo de Tormes) as well as to the works of major writers who have had an impact on their society (Rafael Alberti, Carmen Martin Gaite, Terenci Moix). It will also consider the texts as interventions in the cultural and historical context as well as identity debates in contemporary Spain. In this context, exile, popular culture, collective identity and the relations of genre and gender will be studied in relation to autobiographical writing.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.		
Pre-requisite(s):	Permission of the Spanish Honours Adviser.		
Co-requisite(s):	Compulsory modules for Single and Major Spanish programmes		
Learning and teaching	Weekly contact: 1 x 1.5-hour seminar and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr R Fernández Romero		

## SP3160 Facing the New: Spanish Literature and Society (1888 - 1918)

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SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	2.00 pm - 3.30 pm Fri				

This module will explore changes and tensions in Spanish culture, society, literature and art from the evolution of literary realism and naturalism to the beginning of the historical avant-gardes and the First World War. Through varied materials (poems, short stories, novels, plays, paintings, etc.) students will discuss the transformations of the role of the artist and the intellectual, the modernist 'tradition of the new' and the aesthetical currents of the era. The module will focus on specific literary examples (the novels by Miguel de Unamuno and Jose Martinez Ruis 'Azorin') as well as the cultural and artistic life of the times through the analysis of literary magazines.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.			
Pre-requisite(s):	Permission of the Spanish Honours Adviser.			
Co-requisite(s):	Compulsory modules for Single and N	Major Spanish programmes		
Learning and teaching	Weekly contact: 1 x 1.5-hour semina	r and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr R Fernández Romero			
Lecturer(s)/Tutor(s):	Dr R Fernández Romero			

# SP3162 Strange Girls and Domestic Angels: Women's Writing in Spain

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SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
Academic year:	2017/8				
Planned timetable:	2.00 pm - 3.30 pm Thu				

This module introduces writing by women during and after the Franco dictatorship in Spain and trace the developments in female-authored literature that went hand in hand with social and political change. Despite the regime's insistence on their secondary status and the dismissal of their writing as trivial, several important female writers emerged during the Franco period and their works engage with issues of gender and identity, as well as questions of freedom and conformity. The module will explore how they conveyed a subversive message and portrayed alternative role models to a female readership despite restrictions. The module will also consider how later generations, while echoing some of the same concerns, also draw on Anglo-American traditions in their work. A selection of literary texts by authors such as Carmen Laforet, Rosa Chacel, Carmen Martin Gaite, Ana Maria Matute, Josefina Aldecoa, Rosa Montero, Lucia Etxebarria and Belen Gopegui will be studied.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.			
Pre-requisite(s):	Permission of the Spanish Honours Adviser.			
Co-requisite(s):	Compulsory modules for Single and N	Major Spanish programmes		
Learning and teaching	Weekly contact: 1.5-hour seminar ar	nd 1 surgery hour		
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hou			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr C O'Leary			
Lecturer(s)/Tutor(s):	Dr C O'Leary			

# Modern Languages - Honours Level - 2016/7 - December 2016

SP3163 Tales	53 Tales of the Nation					
sco	TCAT Credits:	15	SCQF Level 9	Semester:	1	
Aca	demic year:	2016/7				
Plar	nned timetable:	2.00 pm - 3.30 p	m Tue.			
nati	The purpose of this module is to study a variety of fictional and non-fictional narratives of the Spanish nation-state as well as stateless nations within the Spanish state from the modern and contemporary period.					
Prog	gramme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.				
Pre-	-requisite(s):	Permission of the Spanish Honours Adviser.				
Co-r	requisite(s):	Compulsory modules for Single, Joint and Major Spanish programmes				
	rning and teaching	Weekly contact: 1 x 1.5-hour seminar and 1 surgery hour.				
met	thods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 ho			dent study: 122 hours	
Ass	essment pattern:	As defined by Q	AA:			
		Written Examina	ations = 0%, Practica	al Examinations = 0	%, Coursework = 100%	
		As used by St Andrews: Coursework = 100%				
Re-A	Assessment pattern:	Coursework = 100%				
Mod	dule Co-ordinator:	Prof J Larios				
Lect	turer(s)/Tutor(s):	Prof J Larios				

SP3222 Language, Love and Loss						
SCOTCAT Credits:	15 SCQF Level 9 Semester: 1					
Academic year:	2016/7					
Planned timetable:	2.00 pm - 3.30 p	m Thu.				
Spanish America following	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.					
Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken					
Pre-requisite(s):	Permission of the Spanish Honours Adviser.					
Learning and teaching	Weekly contact: 1 x 1.5-hour seminar and 1 surgery hour.					
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours			dent study: 122 hours		
Assessment pattern:	As defined by Q	AA:				
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%					
	As used by St Andrews:					
	2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	Coursework - 100%					
Module Co-ordinator:	Prof G San Roman					

## Modern Languages - Honours Level - 2016/7 - December 2016

#### SP4003 Spanish Language 3 **SCOTCAT Credits:** 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 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 which provide the basis for both written and oral work in class. Programme module type: Compulsory for all degrees involving Spanish. SP3002 (see Honours Adviser if SP4102, SP4103 Pre-requisite(s): Anti-requisite(s): there is a problem). Required for: SP4004 Learning and teaching Weekly contact: 1 class and 1 practical and 1 surgery hour. methods and delivery: Scheduled learning: 33 hours Guided independent study: 117 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews: Coursework = 100% Re-Assessment pattern: 3-hour Written Examination = 100%

SP4004	Spanish Language 4: Com	munication Sk	ills			
	SCOTCAT Credits:	15	SCQF Level 10	9	Semester:	2
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	9.00 am Thu, plu	us 1 practical to be	ar	ranged on Tue	
	writing in Spanish. The syl	nis core module is to build on advanced skills in listening, speaking, reading and syllabus uses listening comprehension based on recording, debates and oral syllabus, and a selection of texts for the study of different linguistic registers. The final part of this module.				
	Programme module type:	Compulsory for all degrees involving Spanish.				
	Pre-requisite(s):	SP4003 or SP410	02	Ar	nti-requisite(s):	
	Co-requisite(s):			Re	quired for:	
	Learning and teaching	Weekly contact: 1 class and 1 practical and 1 surgery hour.				
	methods and delivery:	Scheduled learning: 33 hours Guided independent		ndent study: 117 hours		
	Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 60%, Coursework = 40%				0%, Coursework = 40%
		As used by St Andrews:  15-minute Oral Examination = 30%, Aural Comprehension = 30%, Coursework = 40%				
	Re-Assessment pattern:	3-hour Written Examination = 100%				
	Module Co-ordinator:	TBC				
	<b>————</b>					

Dr R Fernández Romero

Dr R Fernández Romero

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

Lecturer(s)/Tutor(s):

TBC

# SP4012 Linguistic Study of the Spanish Language SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 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.

examined at geographical, social and stylistic levels.				
Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.			
Pre-requisite(s):	Permission of the Spanish Honours A	dviser		
Co-requisite(s):	Compulsory modules for Single and I	Major Spanish programmes		
Learning and teaching	Weekly contact: 1 x 1.5-hour semina	r and 1 surgery hour.		
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr K Anipa			
Lecturer(s)/Tutor(s):	Dr K Anipa			

# SP4013 Culture and Conflict: Representing the Spanish Civil War

SCOTCAT Credits:	15 SCQF Level 10		Semester:	2		
Academic year:	2016/7					
Planned timetable:	2.00 pm - 3.30 pm Thu.					

This module considers how the Spanish Civil War has been represented in culture over time, from contemporary literary responses to the testimonial writings of post-war exiles and the fictional representations of subsequent generations. Students will explore such issues as the tensions between culture and politics (propaganda, censorship, etc.), the reliability of memory texts, the 'memory boom' in recent Spanish fiction and post-memory. A selection of literary texts and film will be studied.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.				
Pre-requisite(s):	Permission of the Spanish Honours A	dviser			
Co-requisite(s):	Compulsory modules for Single and N	Major Spanish programmes			
Learning and teaching methods and delivery:	Weekly contact: 1.5-hour seminar and 1 surgery hour and occasional film/video viewing				
	Scheduled learning: 28 hours Guided independent study: 122 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	Coursework = 100%				
Module Co-ordinator:	Dr C O'Leary				
Lecturer(s)/Tutor(s):	Dr C O'Leary				

## SP4014 Spanish Avant-garde(s)

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2017/8				
Planned timetable:	3.00 pm - 4.30 pm Tue				

This module will examine the concepts of 'modernity', 'modernism' and the 'avant-garde' in the context of Spanish culture in the 1920s and 1930s; it will contextualise José Ortega y Gasset's reflections on 'new art' or 'dehumanised art'; it will take stock of Ortega's theory of the novel; it will explore the critique of Western values and the celebration of desire in the work of surrealist poets; it will analyse representations of the life (vitalism)/ reason (rationalism) dichotomy in the work of fiction writers; and it will look at the use of the 'mythical method' by those very same writers.

Programme module type:	Optional for Spanish			
Pre-requisite(s):	Permission of the Spanish Honours Adviser			
Co-requisite(s):	Compulsory modules for Single and Major Spanish programmes			
Learning and teaching	Weekly contact: 1 x 1.5-hour seminar and 1 surgery hour			
methods and delivery:	Scheduled learning: 28 hours Guided independent study: 122 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Prof J Larios			
Lecturer(s)/Tutor(s):	Prof J Larios			

#### SP4015 Action Heroes and Anti-heroes in Early-Modern Spain

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	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
-	Academic year:	2017/8				
	Planned timetable:	9.30 am – 11.00 am Tue				

This module will introduce prose, poetry, theatre, and songs that were written mostly for entertainment in the sixteenth and seventeenth centuries in Spain. All works will center around a single protagonist who creates sympathy and enthusiasm in the audience by committing acts of bravery, daring, and cleverness. He or she thus becomes a hero (or heroine) or anti-hero (or anti-heroine) depending on the legality of the act, and the opinion of the audience. Works studied for this module feature superhero-like knights, real stories from soldiers of fortune, but also violent men and women on the wrong side of the law.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.			
Pre-requisite(s):	Permission of the Spanish Honours Adviser			
Co-requisite(s):	Compulsory modules for Single and N	Najor Spanish programmes		
Learning and teaching	Weekly contact: 1.5-hour seminar and 1 surgery hour.			
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr T Bergman			
Lecturer(s)/Tutor(s):	Dr T Bergman			

## Modern Languages - Honours Level - 2016/7 - December 2016

# SP4016 Contemporary Galician Women Writers SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 3.00 pm - 4.30 pm Tue (TBC)

This module provides students with a sound knowledge and understanding of contemporary narrative by Galician women writers. The module equips students with the necessary theoretical frameworks on feminism and women's writing to explore themes such as displacement, memory, creativity and identity. A range of novels by writers with diverse views on issues relating to gender, politics and language will be analysed in order to explore the many competing discourses in contemporary Galician culture, including nationalism, centralism and cosmopolitanism. The particular focus on Spanish-language work by writers from Galicia allows for access to Galician culture through the medium of Spanish. By the end of the module, students will have developed a broad understanding of the social, cultural, geographical and political factors which inform contemporary writing by Galician women.

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.			
Pre-requisite(s):	Permission of the Spanish Honours Adviser			
Co-requisite(s):	Compulsory modules for Single and M	Major Spanish programmes		
Learning and teaching	Weekly contact: 1.5-hour seminar and 1 surgery hour.			
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 121hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr C Barbour			
Lecturer(s)/Tutor(s):	Dr C Barbour, Dr C O'Leary			

# Modern Languages - Honours Level - 2016/7 - December 2016

# SP4098 Dissertation on a Spanish Topic SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 & 2 (taught twice) Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the Final year of the Honours Programme. Planned timetable: To be arranged.

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 no more than 5,000 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for all degrees involving Spanish once compulsory modules have been taken.			
Pre-requisite(s):			SP4099 or dissertation in another subject	
Co-requisite(s):	Compulsory modules for Single ar	nd M	lajor Spanish pro	grammes
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 seminars plus 4 contact hours withsupervisor over the semester.			
	Scheduled learning: 7 hours		Guided indepen	dent study: 143 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Pract	ical	Examinations = 0	%, Coursework = 100%
	As used by St Andrews: Dissertation = 100%			
Re-Assessment pattern:	Resubmission of Dissertation			
Module Co-ordinator:	Dr T Bergman			
Lecturer(s)/Tutor(s):	TBC			

#### **SP4099 Long Dissertation on a Spanish Topic**

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SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Available only to students in the Final year of the Honours Programme.				
Planned timetable:	To be arranged.				

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

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Programme module type:	SP4099 is required for students taking SP4102.			
Pre-requisite(s):	Permission of the Spanish Honours Adviser			
Anti-requisite(s):	SP4098 or dissertation in another subject			
Learning and teaching	Weekly contact: 3 seminars plus 8 contact hours with supervisor over the year.			
methods and delivery:	Scheduled learning: 11 hours	Guided independent study: 289 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Dissertation = 100%			
Re-Assessment pattern:	Re-Assessment pattern: Resubmission of Dissertation			
Module Co-ordinator:	Module Co-ordinator: Dr T Bergman			
Lecturer(s)/Tutor(s):	TBC			

# SP4102 Semester with Study Abroad in Spain

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
Academic year:	year: 2016/7 & 2017/8			
Planned timetable: To be arranged.				

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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	SP4003 or (SP4102 with SP4099) is compulsory for all degrees involving Spanish.				
Pre-requisite(s):	SP 3002, Permission of the Spanish Honours Adviser  Anti-requisite(s):  SP400		SP4003, SP4103		
Co-requisite(s):	SP4099	Required for:	SP4004		
Learning and teaching methods and delivery:	This is a Study Abroad or Work Placement module.				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews: Coursework = 100%				
Re-Assessment pattern:	Coursework = 100%				
Module Co-ordinator:	Dr K Anipa	Dr K Anipa			

# Modern Languages - Honours Level - 2016/7 - December 2016

#### SP4223 Language and History and Culture **SCOTCAT Credits:** SCQF Level 10 Semester: 2 2016/7 Academic year: Planned timetable: 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. Programme module type: Optional for all degrees involving Spanish once compulsory modules have been Permission of the Spanish Honours Adviser Pre-requisite(s): Anti-requisite(s): SP4102 Learning and teaching Weekly contact: 1.5-hour seminar and 1 surgery hour. methods and delivery: Scheduled learning: 28 hours Guided independent study: 122 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews: Coursework = 100% Re-Assessment pattern: Coursework = 100% **Module Co-ordinator:** Prof J Larios

P4224 Language and Reality and Illusion						
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2016/7					
Planned timetable:	9.30 am - 11.00 am Tue					
This module centres on the in-depth study of Don Quijote, by Miguel de Cervantes, and its cultural and impact. It aims to provide a sound understanding of important modes of literary expression in Spain and America following the conflict of reality and illusion across the centuries. The syllabus will involve the stuselection of canonical texts from Spain and Spanish America.				ion in Spain and Spanish		
Programme module type:	Optional for Hono	ours Spanish				
Pre-requisite(s):	Permission of th	e Spanish Honours	Adviser			
Co-requisite(s):	Compulsory mod	dules for Single and	Major Spanish pro	grammes		
Learning and teaching	Weekly contact:	1 x 1.5-hour semina	r and 1 surgery hour			
methods and delivery:	Scheduled learni	ng: 28 hours	Guided independ	dent study: 122 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	Coursework = 10	0%				

Dr T Bergman

**Module Co-ordinator:** 

# Modern Languages - Honours Level - 2016/7 - December 2016

#### **SP4224 Reality and Illusion**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
Academic year:	2017/8			
Planned timetable:	9.30 am - 11.00 am Tue			

This module centres on the 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 involves the study of a selection of canonical texts from Spain and Spanish America, with most time spent on Cervantes's novel. The module examines how illusion cuts across literary, psychological and moral facets, including satire, parody, genre-mixing, and future interpretations such as the Romantic view of the novel or 20th-century rewritings; modern characterisation and character development, and the creation of realistic figures in a fictional reality-based world; and the themes of good, evil, justice, the rights of the individual versus the collective, and the ability of fiction to benefit people or do them harm.

Programme module type:	Optional for Honours Spanish			
Pre-requisite(s):	Permission of the Spanish Honours Adviser			
Co-requisite(s):	Compulsory modules for Single and N	Major Spanish programmes		
Learning and teaching	Weekly contact: 1 x 1.5-hour seminar and 1 surgery hour.			
methods and delivery:	Scheduled learning: 28 hours	Guided independent study: 122 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr T Bergman			

# School of Philosophical, Anthropological & Film Studies

# Film Studies (FM) modules

FM4099 Film Studies Dissertation							
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2		
	Academic year:	2016/7 & 2017/8  Available only to students in the Second Year of the Honours Programme.					
	Availability restrictions:						
	Planned timetable:	To be arranged.					

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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Compulsory for Single Honours Film Studies			
	Optional for Joint Honours Film Studies			
Pre-requisite(s):	FM2001 and FM2002	Anti-requisite(s):	Any other 4000-level dissertation module	
Learning and teaching methods and delivery:	Weekly contact: Initial 2-hour seminar, followed by presentation and individual meetings with supervisor			
	Scheduled learning: 10 hours	Scheduled learning: 10 hours Guided independent study: 290 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr D Hanlon (S1, Prof R Burgogyne (S2)			
Lecturer(s)/Tutor(s):	Team taught			

# FM4106 War and Cinema SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 12.00 noon - 2.00 pm Tue, 7.00 pm - 9.30 pm Mon (screenings)

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.

Programme module type:	Optional for Film Studies		
Pre-requisite(s):	FM2001 and FM2002		
Learning and teaching	Weekly contact: 2-hour seminar plus screening (up to 3 hours).  Scheduled learning: 55 hours  Guided independent study: 245 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Take Home Examination (48 hour slot) = 100%		
Module Co-ordinator:	Prof R Burgoyne		
Lecturer(s)/Tutor(s):	Prof R Burgoyne	Prof R Burgoyne	

FM4110 Images and Impact: The Uses of Film					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
	Academic year:	2016/7 12.00 noon - 2.00 pm Tue, 7.00 - 9.30 pm Mon (screenings)			
	Planned timetable:				

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.

Programme module type:	Optional for Film Studies	
	Optional for Sustainable Development	
Pre-requisite(s):	FM2001 and FM2002	
Learning and teaching	Weekly contact: 2-hour seminar plus s	creening (up to 3 hours).
methods and delivery:	Scheduled learning: 55 hours Guided independent study: 245 hours	
Assessment pattern:	As defined by QAA:	
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%	
	As used by St Andrews:	
	Coursework = 100%	
Re-Assessment pattern:	Take Home Examination (48 hour slot) = 100%	
Module Co-ordinator:	Dr L Torchin	
Lecturer(s)/Tutor(s):	Dr L Torchin	

# FM4114 Film Genres SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 2.00 pm - 4.00 pm Tue, 4.30 pm - 7.00 pm Mon (screenings)

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 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.

Programme module type:	Optional for Film Studies	
Pre-requisite(s):	FM2001 and FM2002	
Learning and teaching	Weekly contact: 2-hour seminar plus screening (up to 3 hours).  Scheduled learning: 55 hours  Guided independent study: 245 hours	
methods and delivery:		
Assessment pattern:	As defined by QAA:	
	Written Examinations = 0%, Practical I	Examinations = 0%, Coursework = 100%
	As used by St Andrews:	
	Coursework = 100%	
Re-Assessment pattern:	Take Home Examination (48 hour slot) = 100%	
Module Co-ordinator:	TBC	
Lecturer(s)/Tutor(s):	Prof R Dyer, Dr L Donaldson	

FM4117 Modernity and the Moving Image					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	2.00 pm - 4.00 pm Mon, 4.30 pm - 7.00 pm Tue (screenings)			

Our understanding of cinema's emergence and institutionalisation in the early twentieth century has undergone a complete transformation in recent decades. On the one hand, early cinema (1895-1910) is no longer seen as a 'primitive' precursor to a more perfect narrative art, but as part of a much broader visual culture stretching back into the 19th century. On the other, the 'golden age' of silent film in the 1920s has itself been opened up to approaches going far beyond traditional auteurist studies. In both cases, some of the most productive research has examined film as a key component of broader currents that were central to industrial modernity as a whole. This module examines early film cultures in relation to modern life in the areas of art, industry, media, technology, knowledge and governmentality.

Programme module type:	Optional for Film Studies	
Pre-requisite(s):	FM2001 and FM2002	
Learning and teaching methods and delivery:	Weekly contact: 2 hours of lectures (x 11 weeks) 3 hours of film/video viewing (x 11 weeks)	
	Scheduled learning: 55 hours	Guided independent study: 245 hours
Assessment pattern:	As defined by QAA:	
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%	
	As used by St Andrews:	
	Coursework = 100%	
Re-Assessment pattern:	48-hour Take Home Examination = 100%	
Module Co-ordinator:	Dr M Cowan	
Lecturer(s)/Tutor(s):	Dr M Cowan	

# FM4118 Film and Fashion SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 2.00 pm - 4.00 pm Mon, 9.30 am - 12.00 noon Mon (screening)

The module explores two aspects of the interaction between film and fashion: On the one hand, it looks at the ways fashion intersects with film in the area of costume design and general approaches to style. On the other, it surveys the variety of representations that the fashion world has enjoyed in global cinema. It looks at matters of taste, style, glamour, creativity, celebrity, global fashion hubs and gurus, consumerism, but also at the way fashion is produced, managed, and sold, from glossy magazines and advertising through to luxury brands and sweat-shops. Students will have the opportunity to view and discuss documentary and feature films made by a host of important international directors (including, but not limited to Wim Wenders, Albert Maysles, Jun Ichikawa, Bertrand Bonello, Tom Ford, Ben Stiller, Robert Altman, Nora Ephron, and Gillian Armstrong), as well as to research and write on these matters. The discussions will also touch on matters of fashion photography and film.

Programme module type:	Optional for Film Studies	
Pre-requisite(s):	FM2001 and FM2002	
Learning and teaching methods and delivery:	Weekly contact: 2-hour seminar, plus screening.	
,	Scheduled learning: 55 hours	Guided independent study: 245 hours
Assessment pattern:	As defined by QAA:	
	Written Examinations = 0%, Practical E	xaminations = 0%, Coursework = 100%
	As used by St Andrews:	
	Coursework = 100%	
Re-Assessment pattern:	Take Home Examination (48 hour slot) = 100%	
Module Co-ordinator:	Prof D Iordanova	
Lecturer(s)/Tutor(s):	Prof D Iordanova	

# FM4206 Cinemas of India SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: 10.00 am - 12.00 noon Mon, 4.30 pm - 8.00 pm Thu (screening)

This module will go beyond Bollywood and survey the extraordinary range of cinematic production in India since Independence. In addition to classic and contemporary examples of Popular Hindi Cinema ("Bollywood"), we will also study films from other major industries, such as Tamil and Bengali, as well as a range of cinematic practices, such as documentary, avant-garde and state-funded realist cinema. The module will also allow students to explore the various methodologies currently used to study this hugely important cinema (e.g. auteurist, transnational, ethnographic, sociological).

Programme module type:	Optional for Film Studies	
Pre-requisite(s):	FM2001 and FM2002	
Learning and teaching methods and delivery:	Weekly contact: 2-hour seminar plus screening.	
methods and denvery.	Scheduled learning: 55 hours	Guided independent study: 245 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%	
	As used by St Andrews:  Coursework = 100%	
Re-Assessment pattern:	48-hour Take Home Examination = 100%	
Module Co-ordinator:	Dr D Hanlon	
Lecturer(s)/Tutor(s):	Dr D Hanlon	

FM4207 British Cinemas: Conventions, Subversions, and Outsiders					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	2.00 pm - 4.00 pm Tue, 4.30 pm - 7.00 pm Tue (screenings)			

This module approaches British cinema as a site of cultural and formal multiplicity, focusing on its shifting balance between tradition and rebellion, belonging and alienation. The module raises questions about representation and inclusion, as well about formal and narrative strategies. Students will have the opportunity for independent research, by writing a case study of their chosen British star. Weekly topics may include the problematic emergence of queer identities (The Killing of Sister George, Robert Aldrich, 1968), the ambivalent portrayal of British spies and defectors (Another Country, Marek Kanievska, 1984), British filmmaking outside Britain (The Third Man, Carol Reed, 1949), the modernist mockery of British tradition (The Draughtsman's Contract, Peter Greenaway, 1982), and a British star case study.

Programme module type:	Optional for Film Studies	
Pre-requisite(s):	FM2001 and FM2002	
Learning and teaching	Weekly contact: 2-hour seminar plus screening.	
methods and delivery:	Scheduled learning: 55 hours	Guided independent study: 245 hours
Assessment pattern:	As defined by QAA:	
	Written Examinations = 0%, Practical E	xaminations = 0%, Coursework = 100%
	As used by St Andrews:	
	Coursework = 100%	
Re-Assessment pattern:	48-hour Take Home Examination = 100%	
Module Co-ordinator:	Dr E Girelli	
Lecturer(s)/Tutor(s):	Dr E Girelli	

# FM4308 Film Sound SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 10.00 am - 12.00 noon Tue, 4.30 - 7.00 pm Mon (screeening)

Film Sound challenges our critical focus on the film image and explores the expressive contribution of sound to film. Sound has the capacity to shape environment, mood and ultimately the ways in which we engage with film, thus making it a vital consideration in critical and aesthetic approaches. The module

engages with central critical topics representation, aesthetics, affect and technology - and with the production of sound (through case studies of selected practitioners). The module utilises innovative ways of thinking about sound to help students gain a detailed understanding of the different elements of sound in film. The topic is explored through a range of case studies and draws on a diverse mix of sources, including production materials and interviews with

industry personnel. The emphasis on the work of practitioners will help confront and nuance assumptions about watching and making film.

Programme module type:	Optional for Film Studies	
Pre-requisite(s):	FM2001 and FM2002	
Learning and teaching	Weekly contact: 2-hour lectures (x 11 weeks) 3-hour film viewing (x 11 weeks)	
methods and delivery:	Scheduled learning: 55 hours	Guided independent study: 245 hours
Assessment pattern:	As defined by QAA:	
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%	
	As used by St Andrews:	
	Coursework = 100%	
Re-Assessment pattern:	Take-home Examination = 100%	
Module Co-ordinator:	Dr L Donaldson	
Lecturer(s)/Tutor(s):	Dr L Donaldson	

# FM4794 Joint Dissertation (30cr)

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.			
Planned timetable:	To be arranged.			

The dissertation must consist of approximately 10,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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:

http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Joint Honours in the Department of Film Studies			udies
Pre-requisite(s):	A Letter of Agreement	Ar	nti-requisite(s):	More than 30 credits in other dissertation / project modules
Learning and teaching	Weekly contact: As per Letter of Agreement.			
methods and delivery:	Scheduled learning: hours Guided independent study:		ident study: hours	
Assessment pattern:	As defined by QAA:			
	Written Examinations = %, Practical Examinations = %, Coursework = %			
	As used by St Andrews:			
	As per Letter of Agreement.			
Re-Assessment pattern:	As per Letter of Agreement.			
Module Co-ordinator:	As per Letter of Agreement.			

Joint Project (30cr)					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.				
Planned timetable:	To be arranged.				
management and analysis.	is to develop and foster the skills of experimental design, appropriate research vis. The topic and area of research should be chosen in consultation with the determine that the student has access to sources as well as a clear plan of				
Programme module type:	Optional for Joint	Honours in the De	partment of Film Stu	udies	
Pre-requisite(s):	A Letter of Agreement  Anti-requisite(s):  More than 30 credits in other dissertation / project modules				
Learning and teaching	Weekly contact: A	As per Letter of Agr	eement.		
methods and delivery:	Scheduled learning: hours Guided independent study: hours				
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %				
	As used by St Andrews: As per Letter of Agreement.				
	'	•			
Re-Assessment pattern:	As per Letter of A				

# Philosophical, Anthropological & Film Studies - Honours Level - 2016/7 - August 2016 Music (MU) modules

# MU3001 Concert Performance SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: To be arranged.

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.

	1			
Programme module type:	Available to any degree programme.			
Pre-requisite(s):	MU2001 or audition			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2-hour seminars and 30 minute 1:1 tutorials, and 10 hours of additional teaching spread throughout the semester.			
	Scheduled learning: 37 hours Guided independent study: 263 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 75%, Coursework = 25%			
	As used by St Andrews:			
	Practical Examination (Recital = 60%, Short Study= 5%, Performance classes = 10%) 75%, Coursework = 25%			
Re-Assessment pattern:	5000-word Essay = 40%, Practical Examination (40-minute recital) = 60%			
Module Co-ordinator:	Mr B Williams			
Lecturer(s)/Tutor(s):	Mr B Williams			

# Philosophical, Anthropological & Film Studies - Honours Level - 2016/7 - August 2016 Philosophy (PY) modules

# PY3100 Reading Philosophy 1: Texts in Language, Logic, Mind, Epistemology, Metaphysics and Science

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module is designed to develop the philosophical skills students have acquired over their sub-Honours years, and acquaint them with key works in core areas of philosophy. The module involves close study of philosophical texts - historical and contemporary - that address a variety of topics within metaphysics, epistemology, the philosophies of logic and language, mind and science. Students will be required to carry out close study and discussion of these texts in staff-led weekly workshops, thereby furthering their skills of critical evaluation and analysis. Students will also take turns in presenting papers to the workshop, in pair-groups, which will help them to develop important communication skills and provide an opportunity for teamwork.

Programme module type:	Compulsory for BSc Joint Honours Philosophy			
	At least one of PY3100 and PY3200 is a compulsory for all Philosophy degrees.			
	Optional for MA Single and Joint Honour	rs Philosophy		
Pre-requisite(s):	PY1006 or PY1012 and 40 credits in 2000-level PY modules			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, and 1 hour autonomous learning group.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 263 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = %, Coursework = 100%			
	As used by St Andrews:			
	Coursework (including seminar presentation) = 100%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words = 100%			
Module Co-ordinator:	Dr L Jones			
Lecturer(s)/Tutor(s):	Team taught			

# PY3200 Reading Philosophy 2: Texts in Ethics, Metaethics, Religion, Aesthetics and Political Philosophy

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

This module is designed to develop the philosophical skills students have acquired over their sub-Honours years, and acquaint them with key works in core areas of philosophy. The module involves close study of philosophical texts - historical and contemporary - that address a variety of topics within ethics, metaethics, aesthetics, philosophy of religion and political philosophy. Students will be required to carry out close study and discussion of these texts in staff-led weekly workshops, thereby furthering their skills of critical evaluation and analysis. Students will also take turns in presenting papers to the workshop, in pair-groups, which will help them to develop important communication skills and provide an opportunity for teamwork.

Programme module type:	Either PY3100 or PY3200 is compulsory for all Philosophy degrees.			
	Optional for all Philosophy degrees if PY3100 has been taken.			
Pre-requisite(s):	PY1006 or PY1012 and 40 credits in 2000-level PY modules			
Learning and teaching	Weekly contact: 1 x 2-hour seminar, and 1 hour autonomous learning group.			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 263 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework (including seminar presentation) = 100%			
Re-Assessment pattern:	1 or more essays to a total of no more than 7,500 words = 100%			
Module Co-ordinator:	Dr L Jones	Dr L Jones		
Lecturer(s)/Tutor(s):	Team taught	·		

PY3999 Special Topic in Philosopl	hy			
SCOTCAT Credits:	15	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Availability restrictions:	Available only to C	olgate University stu	dents.	
Planned timetable:	To be arranged.			
To be confirmed (module tau	ght by member of Co	olgate Faculty).		
Programme module type:	Colgate University students.			
Pre-requisite(s):	2 courses from Colgate University			
Learning and teaching	Weekly contact: 1 x 2-hour lecture.			
methods and delivery:	Scheduled learning	g: 22 hours	Guided indepen	dent study: 128 hours
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			Coursework = 100%
	As used by St Andrews:			
	As used by St And	rews:		
	_	<b>rews:</b> lly by Colgate Staff -	continuous assessn	nent
Re-Assessment pattern:	Determined annua			nent
Re-Assessment pattern: Module Co-ordinator:	Determined annua	lly by Colgate Staff - o a total of 2,000 wo		nent

74601 Paradoxes						
SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC		
Academic year:	2017/8					
Availability restrictions:	Availability to be co	onfirmed closer to t	he time.			
Planned timetable:	To be arranged.					
we are led from consideration or even ridiculous. Probably	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.					
Programme module type:	Optional for Philos	ophy, Logic and Phi	losophy of Science			
Pre-requisite(s):	PY1006 or PY1012		Anti-requisite(s):	PY4648		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.					
methods and delivery:	Scheduled learning: 33 hours		Guided independent study: 267 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	1 or more essays to a total of 7,000 words (or suitable equivalent in the case of formal logic)					
Module Co-ordinator:	TBC					
Lecturer(s)/Tutor(s):	TBC					

# PY4604 Political Philosophy SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be confirmed closer to the time. Planned timetable: To be arranged.

This module provides an introduction to central issues in contemporary political philosophy. We begin with an overview of central themes in Kant's moral, legal, and political philosophy and proceed to an account of John Rawls's liberal egalitarianism, as presented in A Theory of Justice (1971) and developed in Political Liberalism (1993). Rawls claims that liberalism provides a theory of justice for a modern democratic society that is organized around the principle of fairness. We then examine various critics of Rawls. Among the questions addressed may be: (1) Does Kant's brand of moral theory, constructivism, provide a viable basis on which to build a political philosophy? (2) Is Rawls right to endorse a system of distribution that gives priority to the worst-off? (3) Are individuals answerable to demands of justice, or just governments? (4) Can liberalism answer the challenges of multiculturalism? (5) To which individuals do governments have duties of justice?

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.				
Pre-requisite(s):	PY1006 or PY1012 <b>Anti-requisite(s):</b> PY4825				
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.				
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100% (3 Essays)				
Re-Assessment pattern:	1 or more essays to a total of 7,000 words				
Module Co-ordinator:	TBC				
Lecturer(s)/Tutor(s):	TBC				

# PY4606 Contemporary Epistemology SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be firmly confirmed closer to the time. Planned timetable: To be arranged.

Epistemology is a branch of philosophy concerned with the nature of knowledge, rational belief, evidence, and related issues. In this module, we will be discussing some of the most recent and exciting work in contemporary analytic epistemology. Some of the issues we will focus on are: How do contemporary epistemologists deal with the problem of philosophical scepticism? How is perceptual knowledge possible? What are we saying when we say someone 'knows' something? Do we always mean the same thing? What is the relationship between knowledge and our practical interests? Is a priori knowledge possible? If so, how?

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:  3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr P Greenough		
Lecturer(s)/Tutor(s):	Dr P Greenough		

# PY4607 Continental European Philosophy from Descartes to Leibniz

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module will focus upon the way in which Continental European philosophers of the late seventeenth and early eighteenth century explored the problems inherent in the metaphysics of Descartes. Special attention will be given to questions such as the proper definition of substance; how to understand mind-body interaction, and causation in general; and what the relation between is between God and the universe. The systems of Descartes, Malebranche, and Spinoza will be examined as three very different ways of attempting to develop a coherent set of answers to these questions. In each case an attempt will be made to connect sometimes bizarre metaphysical theses with the ordinary world as experienced by human beings and as explored by natural scientists.

Programme module type:	Optional for Single and Joint Honours Philosophy		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture, 1 x 1-hour seminar and 1 other contact hour		
methods and delivery:	Scheduled learning: 44 hours Guided independent study: 250 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	TBC		
Lecturer(s)/Tutor(s):	TBC		

# PY4608 Political Philosophy in the Age of Revolutions SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2017/8 Availability restrictions: Availability to be firmly confirmed closer to the time. Planned timetable: To be arranged.

This module examines connections between political philosophy and political action. It focuses on political philosophy written in Britain in the seventeenth and eighteenth centuries, and on Hobbes, Locke, Hume, and Burke in particular. It considers this political philosophy in relation to the great political events of that age - the English Civil War, the Glorious Revolution of 1688, the American Revolution, and the French Revolution. In each case we will examine how historical events shape philosophical thinking and how philosophical thinking helps shape subsequent historical events. We will explore how political philosophy shaped the expressed ideology of the revolutionary movements and how this influence was codified in various constitutions and documents. The module will also consider how once revolutionary philosophies transform into defences of the status quo following success in securing political power.

Programme module type:	Optional for Philosophy, Logic and Philosophy of Science		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture/seminar and 1 x 1-hour tutorial.  Scheduled learning: 33 hours  Guided independent study: 267 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr J Harris		
Lecturer(s)/Tutor(s):	Dr J Harris		

# PY4609 Philosophical Methodology SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be confirmed closer to the time. Planned timetable: To be arranged.

Philosophical theories are often motivated by common-sense intuitions about what we know, how we think, or what we ought to do. But what are these intuitions, and why do they play a special role in philosophy? Why should a correct philosophical theory of knowledge, for example, respect our intuitive judgements about what we do or do not know? Do our intuitions depend upon our cultural background? This module will examine the role of intuitions in philosophy, discuss rival accounts of intuition, and consider whether, as philosophers, we have any alternative to relying on intuitions.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Ex	kaminations = 0%, Coursework = 50%	
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words (or suitable equivalent in the case of formal logic)		
Module Co-ordinator:	ТВС		
Lecturer(s)/Tutor(s):	ТВС		

PY4610 Philosophy of Perception						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC	
	Academic year:	2017/8				
	Availability restrictions:	Availability to be firmly confirmed closer to the time.				
	Planned timetable:	To be arranged.				

This module concerns a variety of contemporary philosophical issues relating to perception. Attention will be paid to issues in philosophy of mind, epistemology and metaphysics as well as the relevance of empirical research in cognitive science. Topics covered are likely to include the arguments from illusion and hallucination, sense-data, direct and indirect realism, naïve realism, disjunctive theories of perception, the relation between perception and belief, the relation between the representational content of an experience and its phenomenal character, Molyneaux's question, colour experience and the metaphysics of colours, the perception of change, and the question of whether perceptual experiences have non-conceptual contents.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr S Prosser		
Lecturer(s)/Tutor(s):	Dr S Prosser		

# PY4611 Classical Philosophy SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be firmly confirmed closer to the time. Planned timetable: To be arranged.

We shall conduct a thorough study of central and substantial texts in classical philosophy, with close attention to the philosophical implications. Examples: Plato's Theaetetus and Sophist, or Timaeus and Philebus, or Laches, Charmides, and Lysis; Aristotle's On the Soul, or Eudemian Ethics, or some books of the Physics. It is not ruled out that the focus in some years would be on the pre-socratics, or on Socrates and the 5th century sophists, or on Hellenistic philosophy, or on Platonism after Plato.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.		
Pre-requisite(s):	PY1006 or PY1012, PY2003 or PY2011		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr B Sattler		
Lecturer(s)/Tutor(s):	Dr B Sattler		

# PY4612 Advanced Logic

SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC
Academic year:	2017/8			
Availability restrictions:	Availability to be firmly confirmed closer to the time.			
Planned timetable:	To be arranged.			

The module presupposes facility in the elementary practice of logic provided by PY2001.

This module makes use of meta-theoretical techniques to make logic itself the subject of formal investigation. The main goals of the module will be to tackle the standard metatheoretical results: completeness, compactness, the Lowenheim-Skolem theorems, and Gödel's celebrated incompleteness theorems. Along the way, there will be preparatory discussion of elementary set theory, model theory, and recursion theory.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.			
Pre-requisite(s):	PY1006 or PY1012, PY2001 or PY2010 <b>Anti-requisite(s):</b> PY4816			
Learning and teaching				
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hou		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Take-home Examination = 100%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words (or suitable equivalent in the case of formal logic)			
Module Co-ordinator:	Dr A Cotnoir			
Lecturer(s)/Tutor(s):	Dr A Cotnoir			

# PY4614 Philosophy of Mind SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 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.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.			
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s): PY3002		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.			
methods and delivery:	Scheduled learning: 33 hours		Guided independ	dent study: 267 hours
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words			
Module Co-ordinator:	Dr S Prosser			
Lecturer(s)/Tutor(s):	Dr S Prosser			

# PY4615 Metaphysics SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged.

This module covers a series of inter-related issues in the metaphysics of modality and time. Topics that may be discussed include: the metaphysical status of past and future objects; how objects and persons persist through time; the metaphysical status of merely possible worlds and individuals; and questions about identity across possible worlds. Authors to be discussed may include Katherine Hawley, Sally Haslanger, Saul Kripke, David Lewis, Theodore Sider, Robert Stalnaker, and Timothy Williamson.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science.				
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s): PY3007		PY3007	
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.				
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hou			dent study: 267 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	1 or more essays to a total of 7,000 words				
Module Co-ordinator:	Dr E Glick				
Lecturer(s)/Tutor(s):	Dr E Glick				

# PY4618 Animals, Minds and Language SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be firmly confirmed closer to the time. Planned timetable: To be arranged.

This module will focus on philosophical issues related to the attribution of mental states to non-human animals. Do animals have minds? How can we know about them? In what ways are the mental abilities of animals similar to or different from our own? Topics to be discussed may include: are animals rational? To what extent can beliefs and other mental states be attributed to simple creatures such as insects? Can animals feel pain? Can simple creatures feel pain? How can we know whether they do? Do animals have emotions? Do animals have language and culture, or are these distinctively human capacities?

Programme module type:	Optional for Philosophy, Logic and Philosophy of Science		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.  Scheduled learning: 33 hours  Guided independent study: 267 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70%		
	As used by St Andrews:		
	Coursework = 70%, Scheduled Written Examination = 30%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr D Ball		
Lecturer(s)/Tutor(s):	Dr D Ball		

#### **PY4620 Virtue and Vice**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC
Academic year:	2017/8			
Availability restrictions:	Availability to be confirmed closer to the time.			
Planned timetable:	To be arranged.			

This module investigates philosophical questions related to the evaluation of character. It asks what virtue and vice consist in, and how questions of the evaluation of character interact with questions about what is morally right or wrong. It examines the influential late twentieth-century critique of consequentialist and deontological theories by philosophers such as Elizabeth Anscombe, Bernard Williams and Alisdair McIntyre, and the modern virtue ethical approaches to morality which emerged in response to this critique. The module examines a variety of approaches to virtue and the evaluation of character, from the views of the Ancients, to Hume, Kant and Mill, and onto contemporary accounts. It also considers the implications of recent empirical work on character.

Programme module type:	Optional for Philosophy		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	TBC		

# PY4621 British Philosophy 1650 - 1800: Hume SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be confirmed closer to the time. Planned timetable: To be arranged.

In this module we will study closely the entirety of Hume's first great work, A Treatise of Human Nature. We will consider in detail all of the following topics: Hume's skeptical account of the operations and capacities of human reason; his revolutionary account of the passions; and his enormously influential analysis of morals. The course will introduce students to the various contexts for Hume's philosophy, and will also take into account the history of Hume interpretation. Students will be equipped with skills necessary to reading historical texts, and with critical perspectives on the use of secondary literature.

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Programme module type:	Optional for Philosophy, Logic and Philosophy of Science			
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s):	PY4631	
Learning and teaching	Weekly contact: 2 lectures and 1 x 1-hour seminar.			
methods and delivery:	Scheduled learning: 33 hours	Guided indepen	dent study: 267 hours	
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: Coursework = 50%, Take-Home Examination = 50%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words			
Module Co-ordinator:	Dr J Harris			

	PY4622 K	Kant's Critical	Philosophy
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SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC
Academic year:	2017/8			
Availability restrictions:	Availability to be confirmed closer to the time.			
Planned timetable:	To be arranged.			

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).

Programme module type:	Optional for Philosophy, Logic and Philosophy of Science				
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s): PY4811		PY4811	
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.				
methods and delivery:	Scheduled learning: 33 hours	neduled learning: 33 hours Guided independent		dent study: 267 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	1 or more essays to a total of 7,000 words				
Module Co-ordinator:	Dr J Timmermann				
Lecturer(s)/Tutor(s):	Dr J Timmermann				

### PY4624 Philosophy of Art SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for Philosophy				
Pre-requisite(s):	PY1006 or PY1012 Anti-requisite(s): PY4812				
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.  Scheduled learning: 33 hours  Guided independent study: 267 hour				
methods and delivery:					
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework (including take-home examination) = 100%				
Re-Assessment pattern:	1 or more essays to a total of 7,000 words				
Module Co-ordinator:	Dr L Jones				
Lecturer(s)/Tutor(s):	Dr L Jones				

PY4625 Philosophy and Public Affairs: Global Justice						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC	
	Academic year:	2017/8				
	Availability restrictions:	Availability to be firmly confirmed closer to the time.				

To be arranged.

This module is an introduction to contemporary developments in the overlap between moral, political and social philosophy and public policy. It may explore debates on a number of issues such as just war theory, global distributive justice, education and welfare, arts and culture, environment and bioethics. In 2013-14, the module will address the topic of global justice, focusing on the nature and foundations of human rights, in particular on the status and moral implications of a human right to subsistence. It will also address contemporary developments in just war theory and environmental ethics.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science			
Pre-requisite(s):	PY1006 or PY1012			
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.  Scheduled learning: 33 hours  Guided independent study: 267 hours			
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words			
Module Co-ordinator:	Dr E Ashford			
Lecturer(s)/Tutor(s):	Dr E Ashford	·		

Planned timetable:

### PY4626 Life and Death SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

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?

Programme module type:	Optional for Philosophy, Logic and Philosophy of Science			
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s): PY4826		PY4826
Learning and teaching	Weekly contact: 1 x 2-hour lecture an	nd 1	x 1-hour seminar.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267			dent study: 267 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words			
Module Co-ordinator:	Dr T Pummer			
Lecturer(s)/Tutor(s):	Dr T Pummer, Dr E Ashford			·

PY463

Contemporary Philosophy of Language						
SCOTCAT Credits:	30	SCOF Level 10	Semester:	TBC		
Academic year:	2017/8	Sedi Level 10	Jeniester.	The		
Availability restrictions:	-	rmly confirmed close	or to the time			
Planned timetable:	·	inny commined close	er to the time.			
	To be arranged.					
Using contemporary texts, the Topics that may be discussed tense, or the relationships am	include context and	l indexicality, indefir	nites and definites, o	quantifiers, modality and		
Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science					
Pre-requisite(s):	PY1006 or PY1012					
Learning and teaching	Weekly contact: 1	x 2-hour lecture and	l 1 x 1-hour seminar			
methods and delivery:	Scheduled learning	g: 33 hours	Guided indepen	dent study: 267 hours		
Assessment pattern:	As defined by QAA	۸:				
	Written Examination	ons = 0%, Practical E	xaminations = 0%, C	oursework = 100%		
	As used by St Andrews:					
	Coursework = 100%					
Re-Assessment pattern:	1 or more essays to a total of 7,000 words					
Module Co-ordinator:	Dr E Glick					
Lecturer(s)/Tutor(s):	Dr E Glick					

### **PY4634 Philosophy of Logic** 2 **SCOTCAT Credits:** 30 SCQF Level 10 Semester: Academic year: 2016/7 Planned timetable: To be arranged. The module covers philosophical issues that arise in connection with the foundation of logic. These include questions like: What is the correct logic, and how would we know?; questions about how to understand what truth is, and paradoxes that arise from trying to provide a consistent account of truth; questions about how to handle vagueness in a logical system; and questions about the nature of possibility and necessity. Programme module type: Optional for Philosophy, Logic and Philosophy of Science PY1006 or PY1012; PY2001 or PY4804 Pre-requisite(s): Anti-requisite(s): PY2010 Learning and teaching **Weekly contact**: 1 x 2-hour lecture and 1 x 1-hour seminar. methods and delivery: **Scheduled learning:** 33 hours **Guided independent study:** 267 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews: Coursework = 100% 1 or more essays to a total of 7,000 words (or suitable equivalent in the case of **Re-Assessment pattern:** formal logic) **Module Co-ordinator:** Dr A Cotnoir Lecturer(s)/Tutor(s): Dr A Cotnoir

Contemporary Moral The	eory				
SCOTCAT Credits:	30	SCQF Level 10	Semester:	ТВС	
Academic year:	2017/8				
Availability restrictions:	Availability to be firmly confirmed closer to the time.				
Planned timetable:	To be arranged.				
This module aims to provide a critical appreciation of the main contemporary moral theories. It provides an indepth examination of consequentialism – the view that one should always act so as to bring about the most good – as well as objections to the view and its main alternatives: e.g., Aristotelianism, feminist ethics, Kantianism.					
Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science				
Pre-requisite(s):	PY1006 or PY1012		Anti-requisite(s):	PY4808	
Learning and teaching	Weekly contact: 1	x 2-hour lecture an	d 1 x 1-hour seminar		
methods and delivery:	Scheduled learning: 33 hours		Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA	۸:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	1 or more essays to a total of 7,000 words				
Module Co-ordinator:	ТВС				
Lecturer(s)/Tutor(s):	TBC				

PY4638	4638 Philosophy of Religion						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:		TBC	
	Academic year:	2017/8					
	Availability restrictions:	Availability to be fi	Availability to be firmly confirmed closer to the time.				
	Planned timetable:	To be arranged.					
	central human activities, stud	philosophical understanding of the phenomenon of religion and its relation to other dying such topics as religious and cultural diversity, religious experience, belief and religious language, religion and metaphysics, religion and science.					
	Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science					
	Pre-requisite(s):	PY1006 or PY1012		Anti-requisite	e(s):	PY4819	
	Learning and teaching	Weekly contact: 1	x 2-hour lecture and	d 1 x 1-hour se	eminar		
	methods and delivery:	Scheduled learning	g: 33 hours	Guided in	depen	dent study: 267 hours	
	Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
		As used by St Andrews: Coursework = 100%					
	Re-Assessment pattern:	1 or more essays to a total of 7,000 words					
	Module Co-ordinator:	Prof S Broadie					
	Lecturer(s)/Tutor(s):	Prof S Broadie and	Prof T Mulgan				

		_			
Philosophy of Creativity					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	To be arranged.				
This module examines some may include the definition of process; the relation of creat of creativity; the relation of and intellectual virtues; and v	of 'creativity'; the re ivity to knowledge a creativity to tradition	elation of creativity nd skill; computation n; whether creativity	to imagination; the nal theories of creat is a kind of virtue a	e nature of the creative ivity; Darwinian theorie and its relation to more	
Programme module type:	Optional for Single Science.	and Joint Honours F	Philosophy and Logic	and Philosophy of	
Pre-requisite(s):	PY1006 or PY1012				
	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.				
Learning and teaching	Weekly contact: 1	x 2-hour lecture and	l 1 x 1-hour seminar.		
Learning and teaching methods and delivery:	Weekly contact: 1 Scheduled learning			dent study: 267 hours	
	Scheduled learning As defined by QAA	g: 33 hours	Guided independ	dent study: 267 hours	
methods and delivery:	Scheduled learning As defined by QAA Written Examination As used by St Andre	g: 33 hours A: ons = 50%, Practical	<b>Guided independ</b> Examinations = 0%,	dent study: 267 hours	
methods and delivery:	Scheduled learning As defined by QAA Written Examination As used by St Andrea 3-hour Written Examination	g: 33 hours A: ons = 50%, Practical rews:	Guided independent Examinations = 0%, of the control of the contro	dent study: 267 hours	
methods and delivery: Assessment pattern:	Scheduled learning As defined by QAA Written Examination As used by St Andrea 3-hour Written Examination	g: 33 hours A: ons = 50%, Practical rews: amination = 50%, Co	Guided independent Examinations = 0%, of the control of the contro	dent study: 267 hours	

### PY4642 Trust, Knowledge and Society SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be confirmed closer to the time. Planned timetable: 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?

Programme module type:	Optional for Philosophy, Logic and Philosophy of Science				
Pre-requisite(s):	PY1006 or PY1012				
Learning and teaching					
methods and delivery:					
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	1 or more essays to a total of 7,000 words				
Module Co-ordinator:	TBC				
Lecturer(s)/Tutor(s):	TBC				

PY4643 Philosophy of Law					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
	Academic year:	2016/7			
	Planned timetable:	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.

Programme module type:	Optional for Philosophy, Logic and Philosophy of Science			
Pre-requisite(s):	PY1006			
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words			
Module Co-ordinator:	Prof J Timmermann			
Lecturer(s)/Tutor(s):	Prof J Timmermann			

PY4644 Rousseau on Human Nature, Society, and Freedom					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	To be arranged			

What kind of political freedom is possible in the modern world? In particular, is republican political freedom possible, the freedom of an autonomous sovereign people? Jean-Jacques Rousseau (1712-1778) argues that it is, despite the many ways in which politics has changed since the republics of ancient Athens and ancient Rome. The people do not have to hand over their sovereignty to their governors. Politics can be structured so that society's most fundamental laws are made by the people themselves. We will examine this revolutionary idea by way of a close reading of Rousseau's The Social Contract, giving special attention to the crucial distinction between 'sovereignty' and 'government'. We will bring out Rousseau's radicalism through a contrast with the theory of political freedom proposed by Montesquieu in The Spirit of the Laws. And we will explore the distinctively modern character of Rousseau's republicanism by grounding it in his historicized analysis of human nature.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture, 1 x 1-hour seminar and 1 consultative hour.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr J Harris		
Lecturer(s)/Tutor(s):	Dr J Harris		

# PY4645 Philosophy and Literature SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be firmly confirmed closer to the time. Planned timetable: To be arranged.

This module invites students to philosophically consider the practice, aims, and values of one of humankind's most pre-eminent art forms, literature. We will be asking such questions, and investigating such issues, as: how is literature defined? What is the literary work? Why, and how, should we read literature? Since most literary works are also fictional, we will also focus on the nature of fiction, asking how fiction is defined, and investigating aspects of our engagement with fictional worlds and characters. Students should note this is not a module in literary theory, nor in literary criticism; nor will we be concerned with philosophy as literature, nor philosophy in literature; rather, our enquiry will be a form of philosophical (primarily analytical) aesthetics, carried out in relation to this singular art form.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour seminar.		
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr L Jones		
Lecturer(s)/Tutor(s):	Dr L Jones		

PY4646 Reasons for Action and Belief					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	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.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture	and 1 x 1-hour seminar.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 267 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr J Snedegar		
Lecturer(s)/Tutor(s):	Dr J Snedegar, Prof J Brown		

### PY4647 Humans, Animals, and Nature SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

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 psychologically 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.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar.  Scheduled learning: 33 hours  Guided independent study: 267 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words		
Module Co-ordinator:	Dr B Sachs		
Lecturer(s)/Tutor(s):	Dr B Sachs		

PY4648 Conceptual Engineering and its Role in Philosophy					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	To be arranged.	_		

The module provides an introduction to the ways in which we can criticise and improve our concepts - what is sometimes called 'conceptual engineering'.

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?

Programme module type:	Optional for Philosophy and Logic and Philosophy of Science			
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s):	PY4601	
Learning and teaching	Weekly contact: 1 x 2-hour lecture ar	nd 1 x 1-hour seminar		
methods and delivery:	Scheduled learning: 33 hours	Guided indepen	dent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	1 or more essays to a total of 7,000 words (or suitable equivalent in the case of formal logic)			
Module Co-ordinator:	Dr P Greenough			
Lecturer(s)/Tutor(s):	Dr P Greenough			

To be arranged.

### PY4649 Core Works in Continental Philosophy SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2017/8 Availability restrictions: Availability to be firmly confirmed closer to the time.

This module offers an in-depth study of one of more of the classic texts within so-called 'continental' philosophy. Typical examples of texts may be taught are: Heidegger's Being and Time, Hegel's Phenomenology of Spirit, Nietzsche's Beyond Good and Evil and On the Genealogy of Morals, or Sartre's Being and Nothingness. Depending on the work studied, typical topics will include: the role of history for philosophy, the role of the self and self-consciousness, the foundations of ontology and its relation to our human existence, and the value of our value systems.

Programme module type:	Optional for all Philosophy degrees		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 1 x 2-hour lecture, 1 x 1	-hour seminar	
methods and delivery:	methods and delivery: Scheduled learning: 44 hours Guided independent stu		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%		
	As used by St Andrews:  Coursework (including seminar presentation) = 100%		
Re-Assessment pattern:	1 or more essays to a total of 7,000 words = 100%		
Module Co-ordinator:	Dr B Sattler		
Lecturer(s)/Tutor(s):	Dr B Sattler		

### PY4650 Philosophy, Feminism and Gender

Planned timetable:

SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

This module will introduce students to important metaphysical, epistemological, linguistic, and ethical issues concerning gender, via the arguments and methodology of analytic feminism. Questions addressed may include: what is gender? What might it mean to claim that reason, rationality or knowledge is gendered? Or that language is gendered? How is gender relevant to ethical concerns? How might an understanding of gender impact our thinking about concepts such as equality, justice, and difference? In considering such issues, we will also pay attention to the ways in which gender interacts with other factors, such as race, ethnicity, and social class.

Programme module type:	Optional for Philosophy		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	Weekly contact: 2-hour lecture, 1 hour seminar, 1 office hour		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Reassessment is by one or more essays, totalling no more than 7000 words, questions to be set by module coordinator = 100%.		
Module Co-ordinator:	Dr A Duncan-Kerr		
Lecturer(s)/Tutor(s):	Dr A Duncan-Kerr		

PY4651 Effective Altruism					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
	Academic year:	2016/7			
	Planned timetable:	To be arranged.			

In this module we will explore a constellation of philosophical issues and questions surrounding the effective altruism movement. One set of questions concerns the core philosophical commitments of effective altruism, and their overall tenability. For example: is effective altruism compatible with agent-centred partiality for particular charitable causes? Should non-consequentialists understand benevolence in effective altruist terms? Another set of questions deals with issues arising more from ¿within¿ the effective altruist standpoint: What is the most important cause? Fighting extreme poverty, reducing existential risks, or what? How should we decide where to give if there is no clearly best cause? And to what extent is philosophical progress a priority, from an effective altruist perspective? Within the latter set of questions, special emphasis may be placed on different areas in different years.

Programme module type:	Optional for Philosophy		
Pre-requisite(s):	PY1006 or PY1012		
Learning and teaching	arning and teaching Weekly contact: 2-hour lecture, 1 hour seminar, 1 office hour		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Reassessment is by one or more essays, totalling no more than 7000 words, questions to be set by module coordinator = 100%.		
Module Co-ordinator:	Dr T Pummer		
Lecturer(s)/Tutor(s):	Dr T Pummer ,Prof T Mulgan		

PY4652 The Philosophy of Human Rights						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
	Academic year:	2016/7				
	Planned timetable:	To be arranged.				

We will explore cutting-edge research on the nature, content, and justification of human rights. We begin by examining the origins of human rights and the implications this has for the philosophical understanding thereof (focusing in particular on anti-slavery courts and on the 1948 Universal Declaration of Human Rights). We explore current debates by political philosophers and international legal theorists over how we should properly conceive of human rights, the relationship between their status as moral and legal norms, and the nature of human dignity, to which the major human rights declarations appeal. The module also examines the significance of the fact that human rights are rights, as well as considering critical perspectives on the human rights movement.

Programme module type:	Optional for Philosophy				
Pre-requisite(s):	PY1006 or PY1012				
Learning and teaching	Weekly contact: 2-hour lecture, 1 hour s	seminar, 1 office hour			
methods and delivery:	Scheduled learning: 24 hours	Guided independent study: 256 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	Reassessment is by one or more essays, totalling no more than 7000 words, questions to be set by module coordinator = 100%.				
Module Co-ordinator:	Dr E Ashford				
Lecturer(s)/Tutor(s):	Dr E Ashford, Dr A Etinson				

### **PY4698 Dissertation (Whole Year)**

_	Dissertation (Trible Tear)						
SCOTCAT Credits:		30	SCQF Level 10	Semester:	Whole Year		
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	Available only to students in the second year of the Honours Programme.					
	Planned timetable:	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 (ideally during the summer before the academic session in which the dissertation is taken), and submit the appropriate application form for the approval of the Honours Adviser before the end of advising Semester One.

Programme module type:	Optional for Philosophy and Logic and Philosophy of Science				
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s):		PY4699, PY4701	
Learning and teaching	Weekly contact: Monthly meetings o	ver	two semesters.		
methods and delivery:	Scheduled learning: 8 hours	Guided indepen		dent study: 292 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Dissertation = 100%				
Re-Assessment pattern:	No Re-Assessment available				
Module Co-ordinator:	Philosophy Honours Adviser				

### **PY4699 Dissertation in Philosophy**

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1 or 2
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Available only to students in the second year of the Honours Programme.			
Planned timetable:	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 (ideally during the summer before the academic session in which the dissertation is taken), and submit the appropriate application form for the approval of the Honours Adviser before the end of advising Semester One.

Programme module type:	Optional for Philosophy, Logic and Philosophy of Science				
Pre-requisite(s):	PY1006 or PY1012	Anti-requisite(s):		PY3803, PY4698, PY4701, PY4802	
Learning and teaching	Weekly contact: Fortnightly meeting	s ove	er one semester.		
methods and delivery:	Scheduled learning: 8 hours		Guided independent study: 292 hours		
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical	Exa	minations = 0%, Co	oursework = 100%	
	As used by St Andrews:				
	Dissertation = 100%				
Re-Assessment pattern:	No Re-Assessment available				
Module Co-ordinator:	Philosophy Honours Adviser				

## PY4701 Philosophy and Pedagogy SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 Availability restrictions: Available only to students taking ID4002 in same semester. Planned timetable: 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.

Programme module type:	Optional for Single and Joint Honours Philosophy and Logic and Philosophy of Science, but only for those taking ID4002					
Pre-requisite(s):	PY1006 <b>Co-requisite(s):</b> ID4002					
Learning and teaching	Weekly contact: Fortnightly supervis	sion s	sessions.			
methods and delivery:	Scheduled learning: 6 hours		Guided independent study: 144 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	1 or more essays to a total of 5,000 v	vord	ls			
Module Co-ordinator:	Dr L Jones					
Lecturer(s)/Tutor(s):	Dr L Jones					

PY4794 Joint Dissertation (30cr)						
SCOTCAT Credits:	30	SCQF Level 10	Semester:	TBC		
Academic year:	2016/7 & 2017/8  Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.  To be arranged.					
Availability restrictions:						
Planned timetable:						

The dissertation must consist of approximately 6,000 words of English prose on a topic agreed between the student and two appropriate members of staff (who act as supervisors). The topic does not have to relate to work covered in previous Honours modules, though it may be helpful to the student if it builds on previous work. The topic and range of sources should be chosen in consultation with the supervisors 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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Optional for Joint Honours in the Department of Philosophy			
Pre-requisite(s):	A Letter of Agreement			
Anti-requisite(s):	uisite(s): More than 30 credits in other dissertation / project modules			
Learning and teaching methods and delivery:	Weekly contact: As per Letter of Agreement.			
Assessment pattern: As defined by QAA:				
	Written Examinations = %, Practical Examinations = %, Coursework = %			
	As used by St Andrews:			
	As per Letter of Agreement.			
Re-Assessment pattern:	As per Letter of Agreement.			
Module Co-ordinator:	As per Letter of Agreement.			

### Social Anthropology (SA) modules

SA3030 C	A3030 Critical Thinkers and Formative Texts					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	2	
	Academic year:	2017/8				
	Planned timetable:	2.00 pm and 3.00	) pm Tue			
	Structuralism, which has had Structuralist, Interpretive, Se	age of theoretical approaches in social and cultural anthropology. Beginning with d a profound influence upon the discipline, the module also examines Postmantic and other approaches within anthropology. To achieve a sense of the and of theoretical critique is one of the aims of the module.				
	Programme module type:	Optional for Social Anthropology				
	Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both				
	Learning and teaching	Weekly contact:	1 lecture, 1 seminar.			
	methods and delivery:	Scheduled learni	ng: 22 hours	Guided independent study: 278 hours		
	Assessment pattern:	As defined by QA		Evaminations = 0%	, Coursework = 50%	
			<u> </u>	i Examinations – 0%	, Coursework – 50%	
		As used by St Andrews:  3-hour Written Examination = 50%, Coursework = 50%				
	Re-Assessment pattern:	6,000-word Essay = 100%				
	Module Co-ordinator:	Prof R Dilley				
	Lecturer(s)/Tutor(s):	Prof R Dilley				

SA3031 Anthropological Study of	Language and C	ulture				
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1		
Academic year:	2016/7	2016/7				
Planned timetable:	To be arranged.	To be arranged.				
to the analyses of language	and of culture. The	al theoretical approaches within anthropology that take as their focus issues relating and of culture. The module concentrates on methodological concerns deriving from deals with the problems of interpretation of both language and culture as systems of  Optional for Social Anthropology  SA2001 and SA2002 with passes at grade 11 or better in both				
Programme module type:	Optional for Soci					
Pre-requisite(s):	SA2001 and SA2					
Learning and teaching	Weekly contact:	1 lecture, 1 seminar	•			
methods and delivery:	Scheduled learn	Scheduled learning: 22 hours Guided independent study: 278 hours				
Assessment pattern:	As defined by Q	AA:				
	Written Examina	tions = 50%, Practica	l Examinations = 0%	6, Coursework = 50%		
	As used by St An	drews:				
	3-hour Written E 50%	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	6,000-word Essay = 100%					
Module Co-ordinator:	Prof P G Gow					
Lecturer(s)/Tutor(s):	Prof P G Gow					

SA3032 Regional Ethnography 1					
SCOTCAT Cre	dits:	30	SCQF Level 9	Semester:	1
Academic yea	ar:	2016/7			
Planned time	table:	1.00 pm Mon			
		ected ethnographic regions of the world, and investigates the central themes in the peoples and cultures.			
Programme r	nodule type:	Optional for Social Anthropology			
Learning and	•	Weekly contact: 1 lecture, 1 seminar.			
methods an	methods and delivery:		Scheduled learning: 44 hours Guided independent study: 256 ho		
Assessment	pattern:	As defined by QA	NA:		
		Written Examina	tions = 50%, Practica	l Examinations = 0%	, Coursework = 50%
		As used by St An	drews:		
		3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%  6,000-word essay = 100%  Dr D Knight			
Re-Assessme	nt pattern:				
Module Co-o	rdinator:				
Lecturer(s)/T	utor(s):	Dr D Knight			

SA3049 Perception, Imagination and Communication					
	SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:		2017/8			
	Planned timetable: To be arranged.				

This module will explore the basic human capacities to see, envision and share knowledge as these are transformed within diverse cultures. We will examine different kinds of evidence - the experience of a blind man regaining sight or the existence of culturally specific forms of madness - asking what these tell us about human perceptual, imaginative and communicative abilities. The module will involve some experimentation along the lines of Bartlett's famous 'War of the Ghosts' memory experiment, eschewing reduction either to instinct or to social construction approaches.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:  3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Dr H Wardle		
Lecturer(s)/Tutor(s):	Dr H Wardle		

### SA3050 Interpreting Social and Cultural Phenomena SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2017/8 Planned timetable: 9.00 am and 10.00 am Fri

This module provides a critique of the idea of social and/or cultural construction that currently dominates the human sciences and suggests that it makes better sense to think of everything about human beings (including their very physicality) as historical phenomena. The module addresses five core areas of research in the human sciences: love, food and eating, children and childhood, work, and death. While the emphasis is on anthropological sources, students are asked to read and think about psychological and sociological texts as well. In all cases, students are asked to approach the various readings as products of the writers' theoretical perspectives on what it is to be human and what they consider to be the nature of explanation in the human sciences, including anthropology.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 278 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Prof C Toren		
Lecturer(s)/Tutor(s):	Prof C Toren		

### SA3055 Anthropology and History SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

Ethnohistory is the study of native and/or non-Western peoples from a combined historical and anthropological viewpoint, using written documents, oral literature, material culture and ethnographic data.

Ethnohistory uses both historical and ethnographic data as its foundation. Its historical methods and materials go beyond the standard use of books and manuscripts. Practitioners recognize the utility of maps, music, paintings, photography, folklore, oral tradition, ecology, site exploration, archaeological materials, museum collections, enduring customs, language, and place names. It incorporates the critical use of ethnological concepts and materials in the examination and use of historical source material. Axtell has described ethnohistory as essentially, "the use of historical and ethnological methods to gain knowledge of the nature and causes of change in a culture defined by ethnological concepts and categories" (Axtell 1979). Ethnohistory takes into account the people's own sense of how events are constituted, and their ways of culturally constructing the past. It is a holistic, diachronic approach that is often most rewarding when it can be joined to the memories and voices of living people.

This module will present readings, lectures and discussions about the relationship of history and anthropology. Topics examined include but are not limited to: microhistory; language and translation; ethnohistory and archaeology; writing systems; archival research; working with images and material objects; and ethics.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 278 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
	(Take-Home Examination in 2014-15)		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Dr S Hyland		
Lecturer(s)/Tutor(s):	Dr S Hyland	·	

### **SA3057 Sex and Gender**

A diffa Collect				
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	To be arranged.			

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.

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Programme module type:	Optional for Social Anthropology				
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both				
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.				
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 278 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	6,000-word Essay = 100%				
Module Co-ordinator:	Dr P Gay y Blasco				
Lecturer(s)/Tutor(s):	Dr P Gay y Blasco				

### **SA3059 Colonial and Post-Colonial Representations**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	2
Academic year:	2016/7			
Planned timetable:	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.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 278 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:  3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Dr M Frankland		
Lecturer(s)/Tutor(s):	Dr M Frankland		

### SA3060 Contemporary Issues in Social Anthropology SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2016/7 Planned timetable: 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.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 x 2-hour lecture, 1 x	c 2-hour seminar.	
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Dr A Reed		
Lecturer(s)/Tutor(s):	Team taught		

### **SA3061 Reading Ethnography**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2017/8			
Planned timetable:	To be arranged.			

This module will help students develop the essential skill of reading ethnography. Its aim is to investigate the distinctiveness of anthropology as a way of knowing the world, and of ethnographic writing as an also distinctive way of constructing and conveying that knowledge. The module will lay bare some of the central, often implicit, codes and conventions of ethnographic writing, and will explore how anthropologists use these to create and transmit knowledge about diverse social worlds. Rather than aiming to impart knowledge, the aim of the module is to provide students with the skills necessary to analyse ethnographies, and to guide them through an investigation into the distinctive qualities of anthropological knowledge.

Programme module type:	Optional for Social Anthropology			
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both			
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.			
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Cours			
	As used by St Andrews:			
Coursework = 100%				
Re-Assessment pattern:	6,000-word Essay = 100%			
Module Co-ordinator:	Dr P Gay y Blasco			
Lecturer(s)/Tutor(s):	Dr P Gay y Blasco			

### SA3063 Anthropology of Religion SCOTCAT Credits: 30 SCQF Level 9 Semester: 1 Academic year: 2017/8 Planned timetable: To be arranged.

This module will provide an introduction to the main anthropological approaches to religion. What, if any, are the distinguishing features of religion that make it a special object of analysis? A wide range of ethnographic and historical examples will be used to examine this question and related topics such as the relationship between ritual and power, ideology and consciousness, myth and imagination, and the disenchantment of the world. Consideration will be given also to the role of religion in the evolution of humanity.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.		
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
	As used by St Andrews:		
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Dr M Harris		
Lecturer(s)/Tutor(s):	Dr M Harris		

### **SA3064 The Anthropology of Migration**

SCOTCAT Credits:	30	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

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, citisenship 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.

Programme module type:	Optional for Social Anthropology				
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both				
Learning and teaching methods and delivery:	Weekly contact: 1 lecture, 1 seminar per week and 2 hours film/video viewing in total.				
	Scheduled learning: 24 hours Guided independent study: 276 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:  3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	6,000-word Essay = 100%				
Module Co-ordinator:	Dr M Fumanti				
Lecturer(s)/Tutor(s):	Dr M Fumanti	Dr M Fumanti			

### SA3065 Anthropology of Economic Life SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2017/8

Planned timetable: 11.00 am (days To be confirmed)

This module provides an introduction to the main anthropological approaches to economic life. It explores both classical and current analytical frameworks for understanding how people live and organise their lives in different ways. Students should be aware that this module is not intended to be an economics course for anthropologists and others. Instead, grounded in the comparative and ethnographically-based discipline of anthropology, it brings together a wide range of regional, cultural and historical material.

Programme module type:	Optional for Social Anthropology				
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture (x 11 weeks), 1 x 2-hour seminar (x 11 weeks) and 1 other contact hour (x 11 weeks) 2 hours of film viewing.				
	Scheduled learning: 46 hours Guided independent study: 240 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	6,000-word Essay = 100%				
Module Co-ordinator:	Dr M High				
Lecturer(s)/Tutor(s):	Dr M High				

### **SA3506 Methods in Social Anthropology**

•	0,					
SCOTCAT Credits:	30	SCQF Level 9	Semester:	2		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Not available to General Degree students					
Planned timetable:	To be arranged.					

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.

Programme module type:	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.				
Pre-requisite(s):	SA2001 and SA2002 with passes at gra	de 11 or better in both			
Required for:	SA4099				
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.				
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 278 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
D. A	Coursework = 100%				
Re-Assessment pattern:	6,000-word Essay = 100%				
Module Co-ordinator:	Dr A Joyce				
Lecturer(s)/Tutor(s):	Dr A Joyce				

### SA4005 The West Indies and the Black Atlantic SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

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.

Programme module type:	Optional for Social Anthropology				
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both				
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.				
methods and delivery:	livery: Scheduled learning: 22 hours Guided independent stu				
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50% As used by St Andrews:				
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	6,000-word Essay = 100%				
Module Co-ordinator:	Dr H O B Wardle				
Lecturer(s)/Tutor(s):	Dr H O B Wardle				

SA4058 Visual Anthropology						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2	
	Academic year:	2017/8				
	Planned timetable:	1.00 pm Mon Lecture, 2.00 pm - 4.00 pm Thu (film), Fri 1.00 pm - 2.00 pm OR 2.00 pm - 3.00 pm (tutorial).				

This module provides an introduction to visual anthropology. This topic embraces a broad range of subjects such as photography, material culture, art and ethnographic film. The focus here is on film as a medium of ethnographic investigation and the changing nature of how it has been used as a form of enquiry. Debates about the role of the visual and vision are examined through the contribution of important film-makers. The module involves viewing and critically discussing films, as well as lectures.

Programme module type:	Optional for Social Anthropology				
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both				
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.  Scheduled learning: 55 hours  Guided independent study: 245 hours				
methods and delivery:					
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	6,000-word Essay = 100%				
Module Co-ordinator:	Dr M Frankland				
Lecturer(s)/Tutor(s):	Dr M Frankland				

### SA4059 Living with Material Culture SCOTCAT Credits: 30 SCQF Level 10 Semester: 1 Academic year: 2016/7 Planned timetable: To be arranged.

This module creatively addresses anthropological approaches to material culture and develops a critical understanding of how things play a part in human social relationships. We will explore how people live through things, using the body to transform materials from the environment into artefacts; consuming and displaying objects; incorporating them into domestic activities such as house-building and home-making, even living in them; transforming us in life cycle events such as weddings and funerals; re-membering our pasts through tourist souvenirs, monuments or ceremonial shrines; and creating things which move us, whether 'magical artefacts' or 'works of art'. Students will become familiar with both key theoretical texts in material culture studies and the variety of artifacts and ways of representing them which have become almost iconic in material culture and 'ethnographic art' (from rock art sites to heritage centres; from masks to Surrealist art; from domestic artifacts to folk art).

Programme module type:	Optional for Social Anthropology				
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both				
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.				
methods and delivery:	Scheduled learning: 77 hours	Guided independent study: 223 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%				
	As used by St Andrews:				
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%				
Re-Assessment pattern:	6,000-word Essay = 100%				
Module Co-ordinator:	Dr A Joyce				

SA4098 Library-based Dissertation					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8	3			
Availability restrictions:	Available only to students taking Single Honours, Joint Honours and Major Degrees				
Planned timetable:	To be arranged.				
The module consists of a sup independently researched dis	sertation, up to 10	,000-words.		·	
(Guidelines for printing andrews.ac.uk/printanddesig	, , , , , , , , , , , , , , , , , , , ,				
Programme module type:	Optional for Soci	al Anthropology			
Pre-requisite(s):	SA2001 and SA20	002 with passes at g	rade 11 or better	r in both	
Anti-requisite(s):	SA4099				
Learning and teaching	Weekly contact: 1 x 2-hour tutorial.				
methods and delivery:	Scheduled learning: 44 hours		Guided independent study: 256 hours		
Assessment pattern:	As defined by Q	AA:			
	Written Examina	tions = 0%, Practica	Examinations =	0%, Coursework = 100%	
	As used by St Andrews:				
	7,500-word Disse	ertation = 100%			
Re-Assessment pattern:	7,500-word Essay = 100%				
Module Co-ordinator:	Dr C Lind				
Lecturer(s)/Tutor(s):	TBC	TBC			

SA4099 Primary Research-based D	Dissertation					
SCOTCAT Credits:	30 SCQF Level 10 Semester: Whole Year					
Academic year:	2016/7 & 2017/8	2016/7 & 2017/8				
Availability restrictions:	Available only to students taking Single Honours, Joint Honours and Major Degrees					
Planned timetable:	To be arranged.					
their choice. Student will app to a body of ethnographic da	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.  (Guidelines for printing and binding dissertations can be found at:					
http://www.st-andrews.ac.u	_					
Programme module type:	Optional for Soci	al Anthropology				
Pre-requisite(s):	SA3506		Anti-requisite(s):	SA4098		
Learning and teaching	Weekly contact:	1 x 2-hour tutorial.				
methods and delivery:	Scheduled learni	ing: 44 hours	Guided indepen	dent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: 10,000-word Dissertation = 100%					
Re-Assessment pattern:	10,000-word Essay = 100%					

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oint Dissertation (60cr)					
SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year	
Academic year:	2016/7 & 2017/8	3	- 1		
Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.				
Planned timetable:	To be arranged.				
previous work. The topic and determine that the student had (Guidelines for printing and bhttp://www.st-andrews.ac.uk	as access to source inding dissertation	es as well as a clear s can be found at:			
Programme module type:	Optional for Join	t or 'with' Honours	in the Departmen	nt of Social Anthropology	
Pre-requisite(s):	A Letter of Agree	ment.			
Anti-requisite(s):	Any other dissert	ation / project mo	dule		
Learning and teaching	Weekly contact:	As per Letter of Ag	reement.		
methods and delivery:	Scheduled learn	ing: hours	Guided indep	endent study: hours	
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %				
	As used by St Andrews: As per Letter of Agreement.				
Re-Assessment pattern:	As per Letter of Agreement.				

As per Letter of Agreement.

**Module Co-ordinator:** 

Joint Project (60cr)				
SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year
Academic year:	2016/7 & 2017/8	}		
Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement, downloadable from (url to be confirmed). No student may do more than 60 credits in Dissertation or Project modules.			
Planned timetable:	To be arranged.			
management and analysis. The	to develop and foster the skills of experimental design, appropriate research The topic and area of research should be chosen in consultation with the supervisors are student has access to sources as well as a clear plan of preparation.			
Programme module type:	Optional for Joint or 'with' Honours in the Department of Social Anthropology			
Pre-requisite(s):	A Letter of Agreement			
Anti-requisite(s):	Any other dissertation / project module			
Learning and teaching	Weekly contact:	As per Letter of Agre	eement.	
methods and delivery:	Scheduled learni	ng: hours	Guided indepen	dent study: hours
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %			
	As used by St Andrews:			
	As per Letter of Agreement.			
Re-Assessment pattern:	As per Letter of Agreement.			
ne Assessment pattern.	As per Letter of Agreement.			

SA4821 Amerindian Language and	821 Amerindian Language and Culture					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	2		
Academic year:	2017/8					
Planned timetable:	12.00 noon - 1.00	) pm Tue, 1.00 pm - 2	2.00 pm Thu.			
	es students to the rudiments of an indigenous South American language vastly different ages; it outlines salient elements of the culture of which this language is a part.					
Programme module type:	Optional for Socia	Optional for Social Anthropology				
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both					
Anti-requisite(s):	SA3021					
Learning and teaching	Weekly contact: 1 lecture and 1 seminar					
methods and delivery:	Scheduled learni	ng: 22 hours	Guided independ	dent study: 278 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%					
	As used by St Andrews:  3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	6,000-word Essay = 100%					
Module Co-ordinator:	Dr S Hyland					
Lecturer(s)/Tutor(s):	Dr S Hyland					

2.00 pm - 4.00 pm Tue

### SA4850 Andes SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2016/7

The Andes Mountains were home to some of the most original and sophisticated pre-capitalist states, notably the Inca empire. In this module the emergence and transformation of Andean civilisation is set in its wider context before and after the European invasion. The importance of past and present agencies in the construction of Andean identities requires ethnographic examination of memory of modern Andean communities. Mythohistorical accounts will be complemented by other disciplinary approaches that presuppose absolute chronology.

	absolute emonology.			
Programme module type:	Optional for Social Anthropology			
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both			
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.			
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 278 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:  3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	6,000-word Essay = 100%			
Module Co-ordinator:	Dr S Hyland			
Lecturer(s)/Tutor(s):	Dr S Hyland			

### SA4855 Anthropology, Literature and Writing

Planned timetable:

SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
Academic year:	2016/7				
Planned timetable:	To be arranged.				

Links between Anthropology and Literature have been diverse and long-lived. Moreover, with the rise of 'post-modern critique' and debates over the politics of authorship and over the persuasiveness and properties of representation, issues linking these two genres of writing have, for some time at least, assumed central importance in the discipline. This module will review many of these issues, the problems raised and solutions suggested.

Programme module type:	Optional for Social Anthropology			
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.			
methods and delivery:	Scheduled learning: 50 hours	Guided independent study: 250 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	6,000-word Essay = 100%			
Module Co-ordinator:	Dr A Reed			
Lecturer(s)/Tutor(s):	Dr A Reed			

### SA4857 West Africa SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 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.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar p	er week and fortnightly tutorial.	
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 270 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Prof R Dilley		
Lecturer(s)/Tutor(s):	Prof R Dilley		

SA4860 Anthropology of Amazonia						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1	
	Academic year:	2017/8				
	Planned timetable:	10.00 am Mon				

The indigenous peoples of Amazonia have been the subjects of a dramatic increase in ethnographic attention since the late 1960's from anthropologists from many different countries, and the field is currently generating important publications of both ethnographic and theoretical topics. The module addresses this literature, and develops a substantive knowledge of the nature of indigenous societies of the region, on areas like ecology, social organization, recent history, mythology, ritual and the body. By a process of reiterated comparison between specific ethnographic cases, the module allows for the appreciation of these many separate societies as topological transformations of each other, and hence to raise important historical questions about these supposedly 'a-historical' societies.

Programme module type:	Optional for Social Anthropology			
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both			
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.			
methods and delivery:	Scheduled learning: 30 hours Guided independent study: 270 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	6,000-word Essay = 100%			
Module Co-ordinator:	Prof P Gow			
Lecturer(s)/Tutor(s):	Prof P Gow			

SA4862 Ir	4862 Imagining the World: The Anthropology of Consciousness						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1		
	Academic year:	2016/7					
	Planned timetable:	To be arranged.					
		consciousness is central to contemporary anthropology. This module shows how significant are for understanding certain aspects of consciousness and for the development of theory					
	Programme module type:	Optional for Socia	Optional for Social Anthropology				
	Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both					
	Learning and teaching	Weekly contact: 1 lecture, 1 seminar.					
	methods and delivery:	Scheduled learning: 22 hours Guided independent study: 278 hours			dent study: 278 hours		
	Assessment pattern:	As defined by QA	AA:				
		Written Examina	tions = 50%, Practica	l Examinations = 0%	, Coursework = 50%		
		As used by St Andrews:					
		3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%					
	Re-Assessment pattern:	6,000-word Essay = 100%					
	Module Co-ordinator:	Prof C Toren					
	Lecturer(s)/Tutor(s):	Prof C Toren		·	·		

SA4863 Youth in Africa					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	1
	Academic year:	2017/8			
	Planned timetable:	2.00 pm Thu			

This module will offer students the opportunity to examine past and present theoretical debates on colonial and postcolonial transformations in Africa. 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 colonial and postcolonial youthful subjectivities. The module will focus specifically on a series of interconnected debates on the role of youth in colonial and postcolonial Africa. This is intended to increase students' awareness of the role played by African youth in wider political, social, and economic transformations on the continent, and for current anthropological debates on agency and personhood, on gender and intimacy, on subjectivity and identity.

Programme module type:	Optional for Social Anthropology			
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both			
Learning and teaching	Weekly contact: 1 lecture, 1 seminar.			
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	6,000-word Essay = 100%			
Module Co-ordinator:	Dr M Fumanti			
Lecturer(s)/Tutor(s):	Dr M Fumanti			

### SA4864 Melanesian Anthropology SCOTCAT Credits: 30 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

Melanesia has long provided anthropology with some of its more challenging ethnographies, and stimulated theoretical developments regarding exchange, kinship, politics, gender and ecology. These domains will be explored through a discussion of the aesthetics of Melanesian sociality, tacking back and forth between current issues and earlier ethnographies, with the aim of apprehending the predicaments of contemporary life. We will also consider the continuing stimulus for anthropology, and discuss recent methodological moves which make deliberate borrowings from Melanesia. One objective will be to describe what a truly Melanesian anthropology would look like.

Programme module type:	Optional for Social Anthropology			
Learning and teaching Weekly contact: 1 lecture, 1 seminar.				
methods and delivery:	Scheduled learning: 44 hours	Guided independent study: 256 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	As used by St Andrews:			
	3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	6,000-word Essay = 100%			
Module Co-ordinator:	Dr T Crook			
Lecturer(s)/Tutor(s):	Dr T Crook			

SA4866 Anthropology and Eurasia					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2
Academic year: 2017/8					
	Planned timetable:	10.00 am - 12.00 noon Tue (film), 11.00 am - 1.00 pm Thu Lecture			

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.

Programme module type:	Optional for Social Anthropology		
Pre-requisite(s):	SA2001 and SA2002 with passes at grade 11 or better in both		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar, 1 hour of film/video viewing		
methods and delivery:	Scheduled learning: 22 hours	Guided independent study: 278 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews: 3-hour Written Examination or Take-Home Examination = 50%, Coursework = 50%		
Re-Assessment pattern:	6,000-word Essay = 100%		
Module Co-ordinator:	Dr S Bunn		
Lecturer(s)/Tutor(s):	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					
	SCOTCAT Credits: 15 SCQF Level 9 Semester: 2				
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	2.00 pm - 5.30 pm Mon and Thu (TBC)			

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."

Programme module type:	Compulsory for Astrophysics		
rrogramme module type.	Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503)		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 77 hours Guided independent study: 73 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework (practical work, the submission of computer code and computational solutions to given problems) = 100%		
Re-Assessment pattern:	No Re-Assessment available - laboratory based		
Module Co-ordinator:	Dr P Woitke		
Lecturer(s)/Tutor(s):	Dr P Woitke, Dr C Helling, Prof K Horne		

### AS4010 Extragalactic Astronomy SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 12.00 noon Mon, Tue, Thu (TBC)

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.

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.

Programme module type:	Compulsory for Astrophysics BSc and Mphys Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
Pre-requisite(s):	AS2001 or AS2101, PH2011, PH2012, MT2001 or (MT2501 and MT2503)  Anti-requisite(s): AS4022 Cosmology and AS3011 Galaxie			
Required for:	AS5003 unless other pre-requisites	for that module me	t.	
Learning and teaching methods and delivery:	Weekly contact: 3 lectures occasionally replaced by tutorials			
Scheduled learning: 30 hour		Guided indepe	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA:  Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework = 20%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr V Wild			
Lecturer(s)/Tutor(s):	Dr V Wild, Prof K Horne			

### AS4011 The Physics of Nebulae and Stars 1 SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 10.00 am Tue, Wed, Thu

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.

Programme module type:	Compulsory for Astrophysics MPhys			
	At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are compulsory for Astrophysics BSc			
	Optional for Astrophysics, Physics E	Sc		
	Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics MPhys			
Pre-requisite(s):	AS2001 or AS2101, PH2011, PH2012, MT2001 or (MT2501 and MT2503), PH3081 or PH3082 or MT2003 or (MT2506 and MT2507)			
Anti-requisite(s):	AS4023, AS3015	Require	d for:	AS4012
Learning and teaching methods and delivery:			ole-group tutorials.	
,	Scheduled learning: 30 hours Guided independent study: 120 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		%, Coursework = 25%	
	As used by St Andrews:			
	2-hour Written Examination = 75%, Coursework = 25%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr K Wood			
Lecturer(s)/Tutor(s):	Dr K Wood			

### AS4012 The Physics of Nebulae and Stars 2 SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am odd Mon, Wed, Fri, 3.00 pm even Tue (TBC)

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.

Programme module type:	Compulsory for Astrophysics MPhys At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are compulsory for Astrophysics BSc Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	AS4011	Anti-requisite(s):	AS4023, AS3015
Learning and teaching methods and delivery:			ble-group tutorials.
methous and denvery.	Scheduled learning: 30 hours Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 75%, Coursework = 25%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Prof A C Cameron		
Lecturer(s)/Tutor(s):	Prof A C Cameron and Dr P Woitke		

### AS4015 Gravitational and Accretion Physics SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 9.00 am - 10.00 am Mon, Wed, Fri

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.

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Programme module type:	At least 2 of AS4015, AS4025, PH4031 are compulsory for Astrophysics MPhys At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are		
	compulsory for Astrophysics BSc		
	Optional for Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 (or MT2501 and MT2503), (PH3081 or PH3082 or MT2003 or [MT2506 and MT2507])		
Anti-requisite(s):	AS4021		
Learning and teaching methods and delivery:	Weekly contact: 3 lectures occasionally replaced by whole-group tutorials.		
	Scheduled learning: 30 hours	Guided independent study: 120 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews:		
	2-hour Written Examination = 100%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Prof I Bonnell		
Lecturer(s)/Tutor(s):	Prof I Bonnell		

### AS4025 Observational Astrophysics SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 2.00 pm - 5.30 pm Mon and Thu, plus some nights. (TBC)

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.

Students gain experience in observation, data analysis, the UNIX operating system, standard astronomical software packages and modelling, and report writing.

Programme module type:	At least 2 of AS4011, AS4012, AS4015, AS4021, AS4025, PH4031 are compulsory for Astrophysics BSc		
	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	AS2001 or AS2101, PH2011, PH2012, (	MT2001 or [MT2501 and MT2503])	
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2 x 3.5-hour laboratories plus supervised work in the observatory.		
	Scheduled learning: 78 hours Guided independent study: 72 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	No Re-Assessment available - laboratory based		
Module Co-ordinator:	Dr C Cyganowski		
Lecturer(s)/Tutor(s):	Dr C Cyganowski, Dr Sicilia-Aguilar, Prof A Cameron		

# AS4103 Astrophysics Project (BSc) SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to BSc Astrophysics students, and normally only in their final year. Planned timetable: Half time in second semester, plus some preparation in first semester.

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 pre-project report 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.

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. A pre-project report precedes the experimental/computational/theoretical work of the project, and is expected to be directly relevant to the subsequent experimental studies.

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Compulsory for Astrophysics BSc		
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.		
AS5101, PH4111, PH5101, PH5103, PH	4796	
Weekly contact: 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.		
Scheduled learning: 140 hours Guided independent study: 160 hours		
As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews:  Coursework (Review Article, Project Report, Presentation and Oral Examination) = 100%		
No Re-Assessment available - Final year project		
Dr C Helling		
Astronomy staff		
	PH2011, PH2012, MT2001 or (MT2501 [MT2003 or (MT2506 and MT2507)]), A year of BSc Astrophysics programme.  AS5101, PH4111, PH5101, PH5103, PH4  Weekly contact: Project students work semester 2. All students must meet wattend fortnightly meetings with their based in computer clusters in the Schopeer support and informal interaction members of research teams. It is expeprimarily in this environment.  Scheduled learning: 140 hours  As defined by QAA:  Written Examinations = 0%, Practical E  As used by St Andrews:  Coursework (Review Article, Project ReExamination) = 100%  No Re-Assessment available - Final yea	

# AS5001 Advanced Data Analysis SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: This module is intended for students in the final year of an MPhys or MSci programme involving the School Planned timetable: 9.00 am Tue, Thu, 10.00 am Mon, 12.00 noon Thu and 3.00 pm - 5.00 pm Tue (Lab) (TBC)

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.

Programme module type:	At least two of AS5001, AS5002, and AS5003 are compulsory for MPhys Astrophysics			
	Optional for Physics MPhys, Theoretica Mathematics	il Physics, Theoretical Physics and		
Pre-requisite(s):	Familiarity with scientific programming language essential, for example through AS3013 or PH3080. Entry to an MPhys programme in the School.			
Learning and teaching methods and delivery:	Weekly contact: 3 lectures or tutorials and some supervised computer lab sessions			
	Scheduled learning: 30 hours	Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available - laboratory based			
Module Co-ordinator:	Prof K Horne			
Lecturer(s)/Tutor(s):	Prof K Horne			

# AS5002 Magnetofluids and Space Plasmas SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: This module is intended for students in the final year of an MPhys or MSci programme involving the School Planned timetable: 11.00 am Mon, Tue, Thu (TBC)

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.

Programme module type:	At least two of AS5001, AS5002, and AS5003 must be taken for MPhys Astrophysics Optional for Physics MPhys, Theoretical Physics, Theoretical Physics and Mathematics			
Pre-requisite(s):	Familiarity with scientific programming language essential, for example through AS3013 Computational Astrophysics or PH4030 or PH3080 Computational Physics. Entry to an MPhys programme.			
Learning and teaching methods and delivery:	Weekly contact: 3 lectures or tutorials.			
methous and denvery.	Scheduled learning: 32 hours	Guided independent study: 118 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews:			
	2-hour Written Examination = 100%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Prof M M Jardine	Prof M M Jardine		
Lecturer(s)/Tutor(s):	Prof M M Jardine			

55003 Contemporary Astrophy	3 Contemporary Astrophysics					
SCOTCAT Credits:	15	SCQF Level 11	Semester:	1		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Available only to No programme in the	MPhys Astronomy s School.	tudents or a taught	postgraduate		
Planned timetable:	12.00 noon Wed	d, Fri and 5.00 pn	n Tue			
astrophysics at the research	level. Emphasis wi	annual survey of the latest, most interesting, developments in astronomy and level. Emphasis will be placed upon the application of knowledge and expertise ther modules to these current research topics.				
Programme module type:	At least two of AS5001, AS5002, and AS5003 are compulsory for MPhys Astrophysics					
Pre-requisite(s):	AS4010, AS4012, PH3061, PH3081.					
Learning and teaching methods and delivery:	Weekly contact: 3	B lectures and tutori	als			
	Scheduled learning	ng: 30 hours	Guided indepen	ndent study: 120 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%					
	As used by St Andrews: 2-hour Written Examination = 100%					
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7					
Module Co-ordinator:	Dr H Zhao					
Lecturer(s)/Tutor(s):	Dr A Sicilia-Aguila	r, Dr A Mortier, Dr	H Zhao			

## AS5101 Astrophysics Project (MPhys) SCOTCAT Credits: 60 SCQF Level 11 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to final year MPhys Astronomy students Planned timetable: Full time in second semester, plus some preparation in first semester.

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 pre-project report. There is no specific syllabus for this module. Students taking the MPhys 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.

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. A pre-project report precedes the experimental/computational/theoretical work of the project, and is expected to be directly relevant to the subsequent experimental studies.

Programme module type:	Compulsory for Astrophysics MPhys			
Pre-requisite(s):	PH2011, PH2012, (PH3081 or PH3082 or (MT2003 or (MT2506 and MT2507), AS3013, AS4012, Entry to final year MPhys Astronomy			
Anti-requisite(s):	AS4103, PH4111, PH5101, PH5103, PH	4796		
Learning and teaching methods and delivery:	Weekly contact: 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.			
	Scheduled learning: 300 hours Guided independent study: 300 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available - Final year project			
Module Co-ordinator:	Dr C Helling			
Lecturer(s)/Tutor(s):	Astronomy staff			

### Physics & Astronomy - Honours Level - 2016/7 - September 2016 Physics (PH) modules

Electromagnetism					
SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
Academic year:	2016/7 & 2017/8			•	
Planned timetable:	9.05 am Mon ever weeks (TBC)	n numbered weeks	, 9.05 Tue, Thu, 1	5.05 Fri odd-numbered	
vector and differential ca magnetostatics, materials, e	agnetic fields will be explored using a variety of mathematical tools (in particular, alculus). Topics will include: charge and current distributions, electro- and electrodynamics, conservation principles, electromagnetic waves and radiation. Swledge and skills acquired in prior coursework by developing techniques for others in electromagnetism.				
Programme module type:	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Physics and Chemistry, Physics and Mathematics, Theoretical Physics and Mathematics				
Pre-requisite(s):	(PH3081 or PH3082 or MT2003 or MT2506) and PH2012 and [MT2001 or (MT2501 and MT2503)].				
Required for:	PH4025, PH4027, PH4032, PH5005				
Learning and teaching methods and delivery:	Weekly contact: 3	3 lectures or tutoria	ıls.		
methods and delivery:	Scheduled learning	ng: 35 hours	Guided indep	endent study: 115 hour	
Assessment pattern:	As defined by QA		•		
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%				
	As used by St Andrews:				
	2-hour Written Examination = 60%, Coursework = 40%				
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7				
Module Co-ordinator:	Dr C Baily				
Lecturer(s)/Tutor(s):	Dr C Baily				

## PH3012 Thermal and Statistical Physics SCOTCAT Credits: 15 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 12.00 noon odd Mon, Wed, Fri, 2.00 pm even Tue (TBC)

The aim of this module is to cover at honours level the principles and most important applications of thermodynamics and statistical mechanics.

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.

Programme module type:	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, [MT2001 or (MT2503 [MT2003 or (MT2506 and MT2507)])	l and MT2503)], (PH3081 or PH3082 or	
Required for:	PH4025, PH5014		
Learning and teaching methods and delivery:			
methods and denvery.	Scheduled learning: 35 hours	Guided independent study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%		
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework = 20%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Prof S Lee		
Lecturer(s)/Tutor(s):	Prof S Lee, Dr I Leonhardt		

PH3014 Transferable Skills for Physicists							
	SCOTCAT Credits:	15 SCQF Level 9 Semester: Whole Year					
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	Not automatically available to General Degree students.					
	Planned timetable:	10.00 am Wed, oc	10.00 am Wed, occasional 10.00 am Fri (TBC)				

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.

Due sus uses and dela true se	Communication Astronomy, since Physics Theoretical Physics			
Programme module type:	Compulsory for Astrophysics, Physics, Theoretical Physics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), Entry to the School's Honours programme.			
Anti-requisite(s):	PH4040			
Learning and teaching methods and delivery:	Weekly contact: Through the year there are 8 lectures, 7 tutorials, 2 workshops, and about 14 hours of presenting and/or critically evaluating talks.			
	Scheduled learning: 29 hours	Guided independent study: 121 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework on basis of exercises = 100	0%		
Re-Assessment pattern:	No Re-Assessment available - Assignment based			
Module Co-ordinator:	Dr B D Sinclair			
Lecturer(s)/Tutor(s):	Dr B D Sinclair and others			

PH3061 Quantum Mechanics 1						
	SCOTCAT Credits: 10 SCQF Level 9 Semester: 1					
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	9.00 am Tue, Thu (TBC)				

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 the harmonic oscillator. Solution of the Schrödinger equation for central forces, the radial Schrödinger equation, and the hydrogen atom.

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Programme module type:	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics					
Required for:	PH3062, PH4022, PH4025, PH4028, PH5004, PH5005, PH5012, PH5014,		PH5002, PH5003,			
Co-requisite(s):	PH3081 or PH3082 unless already have [MT2003 or (MT2506 and MT2507)]  Pre-requisite(s): PH2011, PH2012, MT2001 or (MT2501 and MT2503)					
Learning and teaching	Weekly contact: 2 lectures and fortnightly tutorials.					
methods and delivery:	Scheduled learning: 26 hours	Guided indepe	ndent study: 74 hours			
Assessment pattern:	As defined by QAA:					
	Written Examinations = 80%, Practi	cal Examinations =	0%, Coursework = 20%			
	As used by St Andrews:					
	2-hour Written Examination = 80%,	Coursework = 20%				
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7					
Module Co-ordinator:	Dr A Kohnle					
Lecturer(s)/Tutor(s):	Dr A Kohnle					

## PH3062 Quantum Mechanics 2 SCOTCAT Credits: 10 SCQF Level 9 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 9.00 am Wed, Fri (TBC)

This module explores more of the key concepts of quantum mechanics, assuming a knowledge of the material in PH3061. The syllabus includes time-independent and time-dependent perturbation theory, including the treatment of degenerate states. The course includes a matrix description of spin, the Bloch sphere representation of spin, systems of interacting spins, and the quantum mechanics of a system of identical particles, which leads to the distinction between fermions and bosons.

Programme module type:	Compulsory for Astrophysics, Single and Joint Honours Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH3061, (PH3081 or PH3082 or [MT20	03 or (MT2506 and MT2507)])		
Required for:	PH4021, PH4022, PH4028, PH4037, PH4040, PH5002, PH5003, PH5004, PH5005, PH5012, PH5014, PH5015			
Learning and teaching methods and delivery:	Weekly contact: 2 lectures and fortnightly tutorials.			
•	Scheduled learning: 26 hours Guided independent study: 74 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework = 20%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr A Kohnle			
Lecturer(s)/Tutor(s):	Dr A Kohnle			

PH3074 Electronics						
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	9.00 am Mon, Wed, Fri, 9.00 am or 11.00 am Fri lab				

This module provides a basic grounding in practical electronics. It introduces and develops the basic principles underlying the synthesis and analysis of analogue circuits. The module is divided into two parts: passive circuits, beginning with a review of dc circuit theory before moving onto complex impedance, passive ac circuits and diode applications; active circuits and amplifiers, including simple bipolar and FET amplifiers, operational and instrumentation amplifiers and applications.

Programme module type:	Compulsory for Physics MPhys Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501	and MT2503)	
Learning and teaching methods and delivery:	Weekly contact: 3 lectures, tutorials or short lab sessions		
	Scheduled learning: 33 hours	Guided independent study: 116 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical	Examinations = 0%, Coursework = 25%	
	As used by St Andrews:		
	2-hour Written Examination = 75%, Co	ursework = 25%	
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr P Cruickshank		
Lecturer(s)/Tutor(s):	Dr P Cruickshank		

### **PH3080 Computational Physics SCOTCAT Credits:** SCQF Level 9 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 3.00 pm Mon and 3.5 hours on 1 afternoon of Tue, Thu, Fri 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 is then on the ways in which Mathematica can be used for problem solving in physics and astrophysics. Programme module type: 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. Pre-requisite(s): PH2011, PH2012, MT2001 or Anti-requisite(s): PH3082 (MT2501 and MT2503) Required for: This or PH3082 or similar is recommended for all physics and astronomy level 4 and 5 modules Learning and teaching Weekly contact: 1 lecture (x10 weeks), 3.5 hour supervised PC classroom time methods and delivery: (x11 weeks) Scheduled learning: 49 hours **Guided independent study:** 51 hours Assessment pattern: As defined by QAA: Written Examinations = 30%, Practical Examinations = 0%, Coursework = 70% As used by St Andrews: 3-hour Computer-based Examination = 30%, Coursework (Quizes) = 70% No Re-Assessment available - laboratory based **Re-Assessment pattern: Module Co-ordinator:** Dr M Mazilu Lecturer(s)/Tutor(s): Dr M Mazilu, Dr A Gillies

PH3081 Mathematics for Physicists							
	SCOTCAT Credits:	redits: 15 SCQF Level 9 Semester: 1					
	Academic year:	2016/7 & 2017/8					
	Planned timetable:	10.00 am odd Mon, and even Tue, Thu, 2.00 pm even Mon					

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 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.

Programme module type:	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				
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503)	Anti-requisite(s):  PH3082, May be taken with MT2506 OR MT3504 but not with both			
Required for:	All PH and AS level 4 and 5 mc unless other pre-requisite(s) (	-		mester level 3 modules,	
Learning and teaching methods and delivery:	Weekly contact: 3 lectures plu	ıs tutoria	ls.		
methous and denvery.	Scheduled learning: 35 hours Guided independent study: 115 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	2-hour Written Examination =	80%, Co	ursework = 2	20%	
	(made up of Class Test = 15% and meaningful engagement with tutorial work = 5%)				
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7				
Module Co-ordinator:	Dr C Baily				
Lecturer(s)/Tutor(s):	Dr C Baily				

PH3082	PH3082 Mathematics for Chemistry / Physics					
	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Available only to Chemistry and Physics MSci students				
	Planned timetable:	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 (TBC)				

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 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.

Programme module type:	Compulsory for Chemistry and Physics MSci				
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), entry to MSci Chemistry and Physics degree programme	Anti-requisite(s):	PH3080, PH3081, May be taken with MT2506 OR MT3504, but not with both		
Required for:	All PH and AS level 4 and 5 modules, and second semester level 3 modules, unless other related taken (eg PH3080 and PH3081) taken.				
Learning and teaching methods and delivery:	Weekly contact: 4 x 1-hour lectures (x 11 weeks), 3.5-hour practicals (x 6 weeks), 1-hour tutorials (x 5 weeks)				
	Scheduled learning: 59 hours Guided independent study: 141 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%				
	As used by St Andrews:				
	2-hour Written Examination = 75%, Coursework = 25%				
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7				
Module Co-ordinator:	Dr C Baily				
Lecturer(s)/Tutor(s):	Dr C Baily				

PH3101 Physics Laboratory 1						
	SCOTCAT Credits:	15	SCQF Level 9	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Planned timetable:	2.00 pm - 5.30 pm Mon and 2.00 pm - 5.30 pm Thu (TBC)				

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.

Programme module type:	Compulsory for Physics BSc and MPhys, Chemistry and Physics MSci Optional for Astrophysics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501	and MT2503)	
Required for:	PH4111 (unless PH4105 is taken), PH51	101	
Learning and teaching	Weekly contact: 2 x 3.5-hour laboratories.		
methods and delivery:	Scheduled learning: 72 hours Guided independent study: 78 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	No Re-Assessment available - laboratory based		
Module Co-ordinator:	Dr C Rae		
Lecturer(s)/Tutor(s):	Dr C Rae and others		

PH4022 Nuclear and Particle Physics						
	SCOTCAT Credits:	10 SCQF Level 10 Semester: 1				
	Academic year:	2016/7				
	Planned timetable:	12.00 noon Wed and Fri and 2.00 pm Tue				

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.

Programme module type:	Compulsory for Astrophysics, Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061 and PH3062		
Anti-requisite(s):	PH4040		
Learning and teaching	Weekly contact: 2 lectures or tutorials.		
methods and delivery:	Scheduled learning: 22 hours Guided independent study: 78 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%		
	As used by St Andrews: 2-hour Written Examination = 90%, Coursework = 10%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr A Kohnle		
Lecturer(s)/Tutor(s):	Dr A Kohnle		

## PH4025 Physics of Electronic Devices SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: 9.00 am even Mon, Tue, Thu, 3.00 pm odd Mon (TBC)

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.

Programme module type:	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]),PH3007, PH3012, PH3061			
Learning and teaching	Weekly contact: 3 lectures or tutorials			
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews: 2-hour Written Examination = 100%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr A DI Falco			
Lecturer(s)/Tutor(s):	Dr A DI Falco			

### **PH4026 Signals and Information**

SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
Academic year:	2016/7 & 2017/8				
Planned timetable:	11.00 am odd Mon, Wed, Fri, 2.00 pm even Mon (TBC)				

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.

Programme module type:	Optional for Astrophysics, Physics, Theoretical Physics (Single and Joint)		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])		
Learning and teaching	Weekly contact: 3 lectures or tutorials.		
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews:		
	2-hour Written Examination = 100%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr P Cruickshank		
Lecturer(s)/Tutor(s):	Dr P Cruickshank and Dr G Smith		

## PH4027 Optoelectronics and Nonlinear Optics SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 9.00 am Tue, Thu, 3.00 pm Fri (TBC)

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.

Programme module type:	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics Undergraduate Programmes.			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3007 (Undergraduates)			
Learning and teaching	Weekly contact: 3 lectures or tutorials			
methods and delivery:	lelivery: Scheduled learning: 32 hours Guided independent study: 118			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews: 2-hour Written Examination = 100%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Prof I D W Samuel			
Lecturer(s)/Tutor(s):	Prof I D W Samuel, Dr M Mazilu			

## PH4028 Advanced Quantum Mechanics SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 12.00 noon Tue and Thu (TBC)

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. The mathematics of complex analysis is introduced to allow this to be used for relevant quantum mechanics problems. Scattering theory is developed using partial waves and Green's functions, leading to a discussion of quantum degenerate gases. Advanced topics in perturbation theory including WKB approximation for exploring differential equations.

The density matrix formalism as the general state description in open quantum systems is presented; open system dynamics are described within the formalism of the density matrix master equation. Quantum information processing is covered, including concepts such as qubits, quantum entanglement, quantum teleportation, and measurement based quantum computing.

Programme module type:	Compulsory for Theoretical Physics		
	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH3061, PH3062, PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures and some tutorials.		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Scheduled learning: 30 hours Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews:		
	2-hour Written Examination = 100%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr B Lovett		
Lecturer(s)/Tutor(s):	Dr B Lovett		

### PH4031 Fluids SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am even Mon, Tue, Thu, 2.00 pm odd Mon (TBC)

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.

Programme module type:	Two of PH4031, AS4011, AS4012, AS4025, AS4015 compulsory for Astrophysics BSc			
	Two of PH4031, AS4025, AS4015 comp	ulsory for Astrophysics MPhys		
	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
Required for:	AS5002 (strongly recommended, thoug	gh not required)		
Learning and teaching	Weekly contact: 3 lectures and some tutorials.			
methods and delivery:	d delivery: Scheduled learning: 32 hours Guided independent stu			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	As used by St Andrews:			
	2-hour Written Examination = 100%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Prof M Jardine			
Lecturer(s)/Tutor(s):	Prof M Jardine			

PH4032 Special Relativity and Fields						
	SCOTCAT Credits:	15 SCQF Level 10 Semester: 1				
	Academic year:	2016/7 & 2017/8  3.00 pm Tue, 4.00 pm Fri				
	Planned timetable:					

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.

Programme module type:	Compulsory for Theoretical Physics, Theoretical Physics and Mathematics Optional for Astrophysics, Physics, Physics and Mathematics		
Pre-requisite(s):	PH3007, PH3081 (or MT equivalent), PH4038		
Required for:	PH5011 (recommended, though not re	quired)	
Learning and teaching			
methods and delivery: Scheduled learning: 32 hours Guided independent study			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:  2-hour Written Examination = 75%, Coursework (assessed tutorial questions) = 25%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr N Korolkova		
Lecturer(s)/Tutor(s):	Dr N Korolkova		

## PH4034 Laser Physics 1 SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 9.00 am Mon, 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 linenarrowed and modelocked lasers and the origin and exploitability of intensity-induced nonlinear optical effects.

Programme module type:	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
Required for:	PH5016 (unless PH4035 is taken) - also	recommended for PH5005		
Learning and teaching	Weekly contact: 3 lectures or tutorials.			
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 90%, Practical Examinations = 0%, Coursework = 10%			
	As used by St Andrews:			
	2-hour Written Examination = 90%, Coursework = 10%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr F Koenig			
Lecturer(s)/Tutor(s):	Dr F Koenig			

### PH4035 Principles of Optics SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8

.12.00 noon Mon, Wed, Fri (TBC)

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.

Programme module type:	Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])			
Required for:	PH5016 (unless PH4034 is taken)			
Learning and teaching				
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	2-hour Written Examination = 75%, Coursework = 25%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr F Koenig			
Lecturer(s)/Tutor(s):	Dr F Koenig			

Planned timetable:

### PH4036 Physics of Music SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 12.00 noon Mon, Tue, Thu (TBC) 1

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.

Programme module type: Optional for Astrophysics, Physics, Theoretical Physics, Physics and Mathematics  Pre-requisite(s): 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  Learning and teaching methods and delivery:  Weekly contact: 3 lectures or tutorials.  Scheduled learning: 32 hours  Guided independent study: 118 hours  As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2-hour Written Examination = 100%  Re-Assessment nattern: Oral Re-Assessment canned at grade 7				
Honours programme in the School of Physics and Astronomy and prior or concurrent attendance at PH3081 or PH3082  Learning and teaching methods and delivery:  Assessment pattern:  As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2-hour Written Examination = 100%	Programme module type:			
methods and delivery:         Scheduled learning: 32 hours       Guided independent study: 118 hours         Assessment pattern:       As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%         As used by St Andrews: 2-hour Written Examination = 100%	Pre-requisite(s):	Honours programme in the School of Physics and Astronomy and prior or		
Assessment pattern:  As defined by QAA:  Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews:  2-hour Written Examination = 100%	Learning and teaching	Weekly contact: 3 lectures or tutorials		
Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%  As used by St Andrews: 2-hour Written Examination = 100%	methods and delivery:	Scheduled learning: 32 hours	Guided independent study: 118 hours	
As used by St Andrews: 2-hour Written Examination = 100%	Assessment pattern:	As defined by QAA:		
2-hour Written Examination = 100%		As used by St Andrews:		
	!			
Re-Assessment nattern: Oral Re-Assessment canned at grade 7				
oral ne-rasessment, capped at grade /	Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator: Dr J Kemp	Module Co-ordinator:	Dr J Kemp		
Lecturer(s)/Tutor(s): Dr J Kemp	Lecturer(s)/Tutor(s):	Dr J Kemp		

PH4038 Lagrangian and Hamiltonian Dynamics					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	This module is intended for students who started their honours programme in the School in 2012/13 and later.			
	Planned timetable:	10.00 am even Mon, Tue, Thu, 2.00 pm odd 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.

Programme module type:	Compulsory for Astrophysics MPhys, Physics MPhys, Theoretical Physics One of PH4038 and MT4507 compulsory for Theoretical Physics and Mathematics			
	and Mathematics	ry and Physics MSci, Physics BSc, Physics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]			
Anti-requisite(s):	MT4507			
Learning and teaching	Weekly contact: 2 or 3 lectures and some tutorials			
methods and delivery:	ethods and delivery: Scheduled learning: 26 hours Guided independent stu			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	As used by St Andrews:			
	2-hour Written Examination = 75%, Coursework = 25%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr B Braunecker			
Lecturer(s)/Tutor(s):	Dr B Braunecker			

## PH4039 Solid State Physics SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Planned timetable: 11.00 am Wed, Fri, 2.00 pm Fri (TBC)

This module is intended to show how the various 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 applied to typical solids such as simple metals, silicon and other semiconductors, and magnetic materials.

Programme module type:	Compulsory for Physics, Theoretical Physics, Chemistry and Physics, Physics and Mathematics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]). PH3012 or CH3717, PH3061 or CH3712			
Co-requisite(s):	PH3061 unless taken previously	Red	quired for:	PH5014
Learning and teaching methods and delivery:	Weekly contact: 3 lectures or tutorials			
memous and denvery.	Scheduled learning: 34 hours Guided independent study: 116 h			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	As used by St Andrews:			
	2-hour Written Examination = 80%, Coursework = 20%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr C Hooley			
Lecturer(s)/Tutor(s):	Dr C Hooley			

PH4040	PH4040 Nuclear and Particle Physics with Advanced Skills						
	SCOTCAT Credits:	15 SCQF Level 10 <b>Semester:</b> 1					
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	Available only to students on the Physics and Logic and Philosophy of Science (to be Physics and Philosophy), and Physics and Computer Science programmes. The module is expected to run every year from 2013/4.  14.00 Tue, Noon Wed and Fri (all from week 4), 10.00 Wed, occasional 10.00 Fri					
	Planned timetable:				ed, occasional 10.00		

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.

Programme module type:	Compulsory for Physics and Logic and Philosophy of Science(to be Physics and Philosophy), and Physics and Computer Science and Joint Honours degrees with Mathematics		
Pre-requisite(s):	PH3061, PH3062, Entry to BSc Honours in Philosophy and Physics or Computer Science and Physics or Mathematics and Physics or Theoretical Physics and Mathematics		
Anti-requisite(s):	PH4022, PH3014, PH4041		
Learning and teaching methods and delivery:	<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.		
	Scheduled learning: 35 hours	Guided independent study: 115 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews:		
	2-hour Written Examination = 60%, Coursework = 40%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr A Kohnle		
Lecturer(s)/Tutor(s):	Dr A Kohnle, Dr B D Sinclair		

PH4041 Atomic, Nuclear, and Particle Physics					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	To be arranged.			

The aim of this module is to describe in terms of appropriate models, the structure and properties of the atom, including its nucleus, the classification of fundamental particles and the means by which they interact. The syllabus includes: electron cloud model of an atom, electron spin and magnetic moment, spin-orbit interactions, revision of single-electron atom and brief qualitative extension to multi-electron atoms, selection rules and line intensities for electric-dipole transitions; nuclear sizes, binding energy, properties of the strong nuclear force; radioactivity, the semi-empirical mass formula; nuclear stability, the shell model, magic numbers; 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.

Programme module type:	Compulsory for BSc and MPhys Astrophysics BSc and MPhys Physics MPhys Theoretical Physics MSci Chemistry and Physics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061 and PH3062		
Anti-requisite(s):	PH4022, PH4037, PH4040		
Learning and teaching methods and delivery:	Weekly contact: 2.7-hour lectures (x 10 weeks), 1-hour tutorials (x 3 weeks)		
memous una activery.	Scheduled learning: 30 hours Guided independent study:120 hours		
Assessment pattern:	As defined by QAA:  Written Examinations = 00% Practical	Evaminations = 0% Coursework = 10%	
Assessment pattern:	Written Examinations = 00%, Practical	Examinations = 0%, Coursework = 10%	
Assessment pattern:	• •	Examinations = 0%, Coursework = 10%	
Assessment pattern:	Written Examinations = 00%, Practical	· · · · · · · · · · · · · · · · · · ·	
Assessment pattern:  Re-Assessment pattern:	Written Examinations = 00%, Practical  As used by St Andrews:	ursework (quizzes) = 10%	
	Written Examinations = 00%, Practical  As used by St Andrews:  2-hour Written Examination = 90%, Co	ursework (quizzes) = 10%	

## PH4042 Concepts in Atomic Physics and Magnetic Resonance SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 Planned timetable: To be arranged.

This module builds on the atomic physics covered in PH4041 to look at the atomic structure of helium and many-electron atoms, magnetic interactions within the atom (leading to fine and hyperfine splitting), the Zeeman effect, and topics in atom-light interaction. These well-established concepts are then used in contemporary topics such as cold atom physics and magnetic resonance, both of which are current research topics within the School.

Programme module type:	Optional for all degrees in the School of Physics & Astronomy.		
Pre-requisite(s):	PH3061, PH3062, (PH4041 or special p	permission from the School)	
Anti-requisite(s):	PH4037		
Learning and teaching methods and delivery:	Weekly contact: 2.7-hour lectures (x 10 weeks)		
	Scheduled learning: 27 hours Guided independent study:123 hours		
Assessment pattern:	As defined by QAA:		
	2-hour Written Examination = 80%, Coursework = 20%		
	As used by St Andrews:		
	2-hour Written Examination = 90%, Coursework (quizzes) = 10%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr G Smith		
Lecturer(s)/Tutor(s):	Dr D Cassettari, Dr G Smith, Dr J Lovett	t, Dr P Wahl	

PH4043 Studies in Physics and Chemistry						
	SCOTCAT Credits:	5	SCQF Level 10	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	•	Available only to students in the honours years of the joint Chemistry and Physics degree programme.			
	Planned timetable:	To be arranged.				

This module, which is for students on the joint degree programme Chemistry and Physics, provides guidance on literature research and communication skills. Students choose area(s) of interest relevant to the joint degree to explore and to write a review article and a provide a short presentation. The module thus addresses important professional skills, develops subject knowledge, and explicitly brings together the two halves of the degree programme.

Programme module type:	Compulsory for the MSci in Chemistry and Physics			
Pre-requisite(s):	CH3441, PH3082, PH3061 This module is available only to students in the honours years of the joint			
Anti-requisite(s):	PH3014	PH3014		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture (x 4 weeks), 1-hour tutorial (x 5 weeks)			
	Scheduled learning: 9 hours Guided independent study: 41 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews:			
	Coursework (including Presentation (20%)= 100%			
Re-Assessment pattern:	No re-assessment available.			
Module Co-ordinator:	Dr B Sinclair			
Lecturer(s)/Tutor(s):	Dr B Sinclair			

PH4105 Physics Laboratory 2	.05 Physics Laboratory 2					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2016/7 & 2017/8					
Planned timetable:	2.00 pm - 5.30 pm Mon and 2.00 pm - 5.30 pm Thu (TBC)					
equipment, and (ii) to instil	(i) to familiarise students with a wide variety of experimental techniques and an appreciation of the significance of experiments and their results. The module opics such as solid state physics, optics, interfacing, and signal processing.					
Programme module type:	Optional for Astro	Compulsory for Physics  Optional for Astrophysics, Theoretical Physics, Physics and Mathematics, Theoretical Physics and Mathematics				
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)])					
Required for:	PH4111 (unless PH3101 is taken)					
Learning and teaching methods and delivery:	Weekly contact: 2 x 3.5-hour laboratories.					
memous and denies,	Scheduled learning	ng: 70 hours	Guided indepen	dent study: 80 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	No Re-Assessment available - laboratory based					
Module Co-ordinator:	Dr C Rae	Dr C Rae				
Lecturer(s)/Tutor(s):	Dr C Rae and othe	ers				

PH4111 Physics Project (BSc)					
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	Whole Year
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	Normally only in t	Normally only in the final year of a Physics BSc programme		
	Planned timetable:	Half time in second semester, plus some preparation in first semester.			

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 pre-project report 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.

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. A pre-project report precedes the experimental/computational/theoretical work of the project, and is expected to be directly relevant to the subsequent experimental studies.

Programme module type:	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, BSc Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]). At least one of PH3101, PH4105		
Anti-requisite(s):	AS4103, AS5101, PH5101, PH5103, PH	4796	
Learning and teaching methods and delivery:	Weekly contact: 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.		
	Scheduled learning: 140 hours Guided independent study: 160 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework (Review essay, Report and Oral Examination) = 100%		
Re-Assessment pattern:	No Re-Assessment available - Final yea	r project	
Module Co-ordinator:	Dr P King		
Lecturer(s)/Tutor(s):	School staff		

## PH4112 Physics Project (Non-graduating - 120) SCOTCAT Credits: 120 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 Availability restrictions: Available to non-graduating students only, by arrangement Planned timetable: No specific hours.

This module is for non-graduating students who wish to pursue a project in physics lasting the whole session. The project is designed to develop students' skills in searching the literature, in the design of the investigation of the topic, in the evaluation and interpretation of data and in the presentation of results. There is no specific syllabus for this module, and students select their project topic in consultation with their supervisor.

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. There is no guarantee that this project will be available.

Programme module type:	Non-graduating students only.		
Learning and teaching methods and delivery:	Weekly contact: As a minimum, weekly meetings with supervisor.		
	Scheduled learning: hours Guided independent study: hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:  Coursework (reports, presentation, and oral examination) = 100%		
Module Co-ordinator:	(TBC)		
Lecturer(s)/Tutor(s):	(TBC)		

### PH4113 Physics Project (Non-graduating - 60)

SCOTCAT Credits:	60	SCQF Level 10	Semester:	1 or 2	
Academic year:	2016/7				
Availability restrictions:	Available to non-graduating students only, by arrangement				
Planned timetable:	No specific hours.				

This module is for non-graduating students who wish to pursue a project in physics lasting one semester. The project is designed to develop students' skills in searching the literature, in the design of the investigation of the topic, in the evaluation and interpretation of data and in the presentation of results. There is no specific syllabus for this module, and students select their project topic in consultation with their supervisor.

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. There is no guarantee that this project will be available.

Programme module type:	Non-graduating students only		
Learning and teaching methods and delivery:	Weekly contact: Weekly meetings with supervisor.		
	Scheduled learning: hours Guided independent study: hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = %, Coursework = %		
	As used by St Andrews:		
	Coursework (reports, presentation, and oral examination) = 100%		
Module Co-ordinator:	(TBC)		
Lecturer(s)/Tutor(s):	(TBC)		

# PH4796 Joint Project (30cr) SCOTCAT Credits: 30 SCQF Level 10 Semester: TBC Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the final year of the Honours Programme on a joint honours BSc degree involving this School, and who have completed the Letter of Agreement. No student may do more than one project module. Planned timetable: To be arranged.

The aim of the project is to develop and foster the skills of experimental design, appropriate research management and analysis, covering both physics and one of computing, mathematics, and philosophy. The topic and area of research should be chosen in consultation with the supervisors in the two schools in order to determine that the student has access to resources as well as a clear plan of preparation.

The project aims to develop students' skills in searching the literature in physics and their other discipline, the evaluation and interpretation of data, and in the presentation of results. The main project is preceded by a pre-project report on a topic which is related to the theme of the project. There is no specific syllabus for this module. 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.

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 members supervising the project and usually also by other members of a research team.

Programme module type:	Optional for students on Joint Honours BSc undergraduate degrees in the School of Physics & Astronomy		
Pre-requisite(s):	A Letter of Agreement		
Anti-requisite(s):	AS4103, AS5101, PH4111, PH5101, PH5103 or More than 30 credits in other dissertation / project modules		
Learning and teaching methods and delivery:	Weekly contact: As per Letter of Agreement.		
methous and denvery.	Scheduled learning: hours Guided independent study: hours		
Assessment pattern:	As defined by QAA: Written Examinations = %, Practical Examinations = %, Coursework = %		
	As used by St Andrews: As per Letter of Agreement.		
Re-Assessment pattern:	As per Letter of Agreement.		
Module Co-ordinator:	Dr P King		

SCOTCAT Credits:	15	SCQF Level 11	Semester:	1
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Normally only taken in the final year of an MPhys or MSci programme involving the School			
Planned timetable:	2.00 pm Mon, Tue	e, Fri (TBC)		
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.				
Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Chemistry and Physics, Theoretical Physics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]) PH3061 and PH3062.			
Required for:	Recommended, b	ut not required, for	PH5004	
Learning and teaching Weekly contact: 3 lectures or tutorials.				
methods and delivery:	Scheduled learning	ng: 30 hours	Guided indep	endent study: 120 hours
•	As defined by QA Written Examinat As used by St And	<b>A:</b> ions = 100%, Praction		endent study: 120 hours
methods and delivery: Assessment pattern: Re-Assessment pattern:	As defined by QA Written Examinat As used by St And 2-hour Written Ex	A: ions = 100%, Practions:	cal Examinations	· · · · · · · · · · · · · · · · · · ·
Assessment pattern:	As defined by QA Written Examinat As used by St And 2-hour Written Ex	A: ions = 100%, Praction lrews: amination = 100%	cal Examinations	· · · · · · · · · · · · · · · · · · ·

Group Theory					
SCOTCAT Credits:	15	SCQF Level 11	Semester:	1	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Normally only taken in the final year of an MPhys or MSci programme involving the School				
Planned timetable:	12.00 noon Wed,	Fri, 3.00 pm Mon (	ГВС)		
dimensional Euclidean spac subgroups, classes, cosets introduction to Lie groups, representation theory of gr representations, characters,	nis module explores the concept of a group, including groups of coordinate transformations in three- imensional Euclidean space; the invariance group of the Hamiltonian operator; the structure of groups: ubgroups, classes, cosets, factor groups, isomorphisms and homorphisms, direct product groups; stroduction to Lie groups, including notions of connectedness, 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 uantum mechanics, including calculation of energy eigenvalues and selection rules.				
Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Chemistry and Physics, Theoretical Physics and Mathematics				
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061 and PH3062.				
	Weekly contact: 3 lectures or tutorials.				
	Weekly contact: 3	Blectures or tutoria	ls.		
	Weekly contact: 3 Scheduled learning		1	ndent study: 118 hours	
methods and delivery:	Scheduled learning As defined by QA	ng: 32 hours A:	Guided indeper	ndent study: 118 hours 0%, Coursework = 0%	
methods and delivery:	Scheduled learning As defined by QA Written Examinat As used by St And	ng: 32 hours A: ions = 100%, Practio	Guided indeper	·	
methods and delivery: Assessment pattern:	Scheduled learning As defined by QA Written Examinat As used by St And 2-hour Written Ex	ng: 32 hours A: ions = 100%, Practions:	Guided indeper	·	
Learning and teaching methods and delivery:  Assessment pattern:  Re-Assessment pattern:  Module Co-ordinator:	Scheduled learning As defined by QA Written Examinat As used by St And 2-hour Written Ex	ng: 32 hours  A: ions = 100%, Praction  Irews: amination = 100%	Guided indeper	·	

	Physics & Astro	onomy - Honour	s Level - 2016/7	7 - September 2016		
PH5004 Quantum Field Theory	4 Quantum Field Theory					
SCOTCAT Credits:	15	SCQF Level 11	Semester:	1		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Normally only taken in the final year of an MPhys or MSci programme involving the School					
Planned timetable:	2.00 pm Thu, 3.00	pm Tue, Fri (TBC)				
applications thereof, includ fermions, solving simple mo mechanics and its relation	introductory account of the ideas of quantum field theory and of simple ding quantization of classical field theories, second quantization of bosons and nodels using second quantization, Feynman's path integral approach to quantum in to classical action principles, field integrals for bosons and fermions, the integral methods and second quantization, and a descriptive introduction to uman diagrams.					
Programme module type:	Compulsory for Th	Compulsory for Theoretical Physics				
	Optional for Astrophysics MPhys, Physics MPhys, Chemistry and Physics, Theoretical Physics and Mathematics					
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]),PH3012, PH3061, PH3062 and PH4038 or MT4507.					
Co-requisite(s):	At least one of PH	5002 and PH5012 is	recommended bu	it not compulsory.		
Learning and teaching	Weekly contact: 3	lectures or tutoria	ls.			
methods and delivery:	Scheduled learning	ng: 30 hours	Guided indeper	ndent study: 120 hours		
Assessment pattern:	As defined by QA	A:				
	Written Examinat	ions = 85%, Practica	I Examinations = 0	%, Coursework = 15%		
	As used by St And					
	2-hour Written Examination = 90%, Coursework = 15%					

Oral Re-Assessment, capped at grade 7

Dr J Keeling

Dr J Keeling

Re-Assessment pattern:

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

SCOTCAT Credits:	15	SCQF Level 11	Semester:	1	
Academic year:	2016/7 & 2017/8				
Availability restrictions:	Normally only taken in the final year of an MPhys or MSci programme involving the School				
Planned timetable:	10.00 am Mon, Tu	ie, Wed, Thu (TBC)			
transient/dynamic behavious modulation, frequency swi optically-pumped solid stat amplification; dispersion and resonators, geometric and	quantitative treatment of laser physics embracing both classical and semiclassical approaches ansient/dynamic behaviour of laser oscillators including relaxation oscillations, amplitude and phase nodulation, frequency switching, Q-switching, cavity dumping and mode locking; design analysis of ptically-pumped solid state lasers; laser amplifiers including continuous-wave, pulsed and regenerative mplification; dispersion and gain in a laser oscillator - role of the macroscopic polarisation; unstable optically options, geometric and diffraction treatments; quantum mechanical description of the gain medium observable in the laser; tunable lasers.				
Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics				
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3007, PH3061 and PH3062. PH4034 is recommended.				
	recommended.				
Anti-requisite(s):	recommended. PH5180				
Learning and teaching	PH5180	lectures or tutoria	ls.		
	PH5180			ndent study: 106 ho	
Learning and teaching methods and delivery:	PH5180  Weekly contact: 4  Scheduled learnin  As defined by QA  Written Examinat  As used by St And	ng: 44 hours A: ions = 100%, Practio	Guided indeper	ndent study: 106 ho	
Learning and teaching	PH5180  Weekly contact: 4  Scheduled learnir  As defined by QA  Written Examinat  As used by St And 2.5-hour (open no	ng: 44 hours A: ions = 100%, Practions:	Guided indeper	ndent study: 106 ho	
Learning and teaching methods and delivery: Assessment pattern:	PH5180  Weekly contact: 4  Scheduled learnir  As defined by QA  Written Examinat  As used by St And 2.5-hour (open no	ng: 44 hours A: ions = 100%, Practions: lrews: utes) Examination =	Guided indeper		

## PH5011 General Relativity SCOTCAT Credits: 15 SCQF Level 11 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: Normally only taken in the final year of an MPhys or MSci programme involving the School Planned timetable: 9.00 am Mon, Wed, Fri

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.

Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH3081 or PH3082, PH3081 or PH3082 or [MT2003 or MT2506 and MT2507)], Recommended PH4038 and PH4032.		
Learning and teaching	Weekly contact: 3 lectures or tutorials		
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews: 2-hour Written Examination = 100%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr M Dominik		
Lecturer(s)/Tutor(s):	Dr M Dominik		

PH5012	H5012 Quantum Optics						
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1		
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	Normally only taken in the final year of an MPhys or MSci programme involving the School					
	Planned timetable:	11.00 am Mon, Tue, Thu					
Ī	Quantum ontics is the the	ony of light that u	inifies wave and	particle optics Out	antum antics describes		

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.

Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061, PH3062, PH4028.		
Learning and teaching	Weekly contact: 3 lectures or tutorials.		
methods and delivery:	Scheduled learning: 32 hours Guided independent study: 118 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	As used by St Andrews: 2-hour Written Examination = 100%		
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr N Korolkova		
Lecturer(s)/Tutor(s):	Dr F Koenig, Dr N Korolkova		

PH5014	H5014 The Interacting Electron Problem in Solids					
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Normally only taken in the final year of an MPhys or MSci programme involving the School				
	Planned timetable:	4.00 pm Mon, Tue, Thu (TBC)				

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.

Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH4039, PH3012, PH3061, PH3062.		
Learning and teaching methods and delivery:	Weekly contact: 2 lectures and some tutorials.		
methous and denvery.	Scheduled learning: 20 hours	Guided independent study: 130 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 50%, Coursework = 50%		
	As used by St Andrews:		
	Coursework = 50%, Presentation plus 0	Oral Examination = 50%	
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr C Hooley		
Lecturer(s)/Tutor(s):	Dr C Hooley		

PH5015	H5015 Applications of Quantum Physics					
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Normally only taken in the final year of an MPhys or MSci programme involving the School				
	Planned timetable:	12.00 noon Mon,	Tue, Thu (TBC)			

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.

Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics		
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3061, PH3062.		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 lectures/tutorials, 1 x 3-hour research lab visit, 3 hours student presentations during the semester.		
	Scheduled learning: 30 hours Guided independent study: 120 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 80%, Practical	Examinations = 0%, Coursework = 20%	
	As used by St Andrews:		
	2-hour Written Examination = 80%, Co	ursework = 20%	
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7		
Module Co-ordinator:	Dr D Cassettari		
Lecturer(s)/Tutor(s):	Dr D Cassettari, Dr M Mazilu		

PH5016 Biophotonics					
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1
	Academic year:	2016/7 & 2017/8  Normally only taken in the final year of an MPhys or MSci programme involving the School  9.00 am Mon, Wed, Fri (TBC)			
	Availability restrictions:				
	Planned timetable:				

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.

Programme module type:	Optional for Astrophysics MPhys, Physics MPhys, Theoretical Physics, Chemistry and Physics, Theoretical Physics and Mathematics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH4034 or PH4035.			
Learning and teaching	Weekly contact: 3 lectures/tutorials.			
methods and delivery:	Scheduled learning: 24 hours	Guided independent study: 126 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 80%, Practical Examinations = 0%, Coursework = 20%			
	As used by St Andrews: 2-hour Written Examination = 80%, Coursework = 20%			
Re-Assessment pattern:	Oral Re-Assessment, capped at grade 7			
Module Co-ordinator:	Dr T Brown			
Lecturer(s)/Tutor(s):	Dr T Brown, Prof M C Gather, Dr C Pen	edo-Esteiro		

PH5023 Monte Carlo Radiation Transport Techniques						
	SCOTCAT Credits: 15 SCQF Level 11 Semester: 1					
	Academic year: 2016/7 & 2017/8					
	Planned timetable: 2.00 pm Tue, Fri and 11.00 am Wed					

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.

Programme module type:	Optional for Astronomy and Physics					
Pre-requisite(s):	PH2012, plus at least one of: AS3013, PH3080. PH3081, PH3082.					
Learning and teaching methods and delivery:	Weekly contact: 3 hours of lectures (x 6 weeks), 1-hour tutorials (x 5 weeks), during semester 3 x 3 hour supervised computer lab sessions					
	Scheduled learning: 32 hours Guided independent study: 118 hours					
Assessment pattern:	As defined by QAA: Written Examinations = 25%, Practical Examinations = 25%, Coursework = 50%					
	As used by St Andrews:  Coursework (worksheets = 50%, 3-hour computing test = 25%, 1-hour Class Test = 25%) = 100%					
Re-Assessment pattern:	No Re-Assessment available - laboratory based					
Module Co-ordinator:	Dr K Wood					
Lecturer(s)/Tutor(s):	Dr K Wood					

PH5024	PH5024 Modern Topics in Condensed Matter Physics						
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	1		
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	Available only to those in the final year of an MPhys programme					
	Planned timetable:	10.00 am Tue, Wed, Thu (TBC)					

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.

Programme module type:	Optional for MPhys programmes			
Pre-requisite(s):	PH3061, PH3062, (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3080, (PH4037 or PH4041), PH4039			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 3 hours of lectures (x 7 weeks), 1-hour tutorials (x 4 weeks), 3-hour presentations (x 3 weeks)			
	Scheduled learning: 34 hours Guided independent study: 116 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 40%, Coursework = 60%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available - assignment based			
Module Co-ordinator:	Dr P King			
Lecturer(s)/Tutor(s):	Dr P Wahl, Dr P King			

# PH5101 Physics Project (MPhys) SCOTCAT Credits: 60 SCQF Level 11 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Normally Available only to those in the final year of an MPhys Physics or MSci Chemistry and Physics degree programme Planned timetable: Full time in second semester, following some work in first.

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 pre-project report 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.

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. A pre-project report precedes the experimental/computational/theoretical work of the project, and is expected to be directly relevant to the subsequent experimental studies.

Programme module type:	and the Aurent Communication of the Physics MADburn					
Programme module type:	Compulsory for Physics MPhys					
	Either PH5101 or CH5441 is compu	sory for Chemistry a	nd Physics			
Pre-requisite(s):	PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3101 or PH4105	2501 and MT2503), (PH3081 PH4111, PH5103, H3082 or [MT2003 or PH4796 PH4796				
Learning and teaching methods and delivery:	Weekly contact: 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.					
	Scheduled learning: 300 hours Guided independent study: 300 hours					
Assessment pattern:	As defined by QAA:	<u>.</u>				
	Written Examinations = 0%, Practic	al Examinations = 0%	6, Coursework = 100%			
	As used by St Andrews:					
	Coursework (Review essay, Report, and Oral Examination) = 100%					
Re-Assessment pattern:	No Re-Assessment available - Final year project					
Module Co-ordinator:	Dr P King					
Lecturer(s)/Tutor(s):	School staff					

# PH5103 Project in Theoretical Physics (60) SCOTCAT Credits: 60 SCQF Level 11 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Normally available only to those in the final year of a Theoretical Physics or Mathematics and Theoretical Physics degree programme. Planned timetable: Full time for second semester folliowing some work in first

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.

The main project is preceded by a pre-project report 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. A pre-project report precedes the computational/theoretical work of the project, and is expected to be directly relevant to the subsequent studies.

Please note: Some projects will need learning from specific modules - please contact potential supervisors.

Compulsory for Theoretical Physics				
Either PH5103 or MT5999 is compulsory for Theoretical Physics and Mathematics				
PH2011, PH2012, MT2001 or (MT2501 and MT2503), (PH3081 or PH3082 or [MT2003 or (MT2506 and MT2507)]), PH3062, PH3007, (PH4022 or PH4040 or PH4041), PH4032.				
PH5102, PH5101, PH4111, AS4103, AS5	5101, PH4796			
Weekly contact: 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 theoretical physics research seminars.				
Scheduled learning: 28 hours	Guided independent study: 572 hours			
As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
As used by St Andrews:  Coursework (review essay, report, oral examination) = 100%				
No Re-Assessment available - Final year project				
Dr J Keeling				
School staff				
	Either PH5103 or MT5999 is compulsor Mathematics  PH2011, PH2012, MT2001 or (MT2501 [MT2003 or (MT2506 and MT2507)]), FPH4041), PH4032.  PH5102, PH5101, PH4111, AS4103, ASS Weekly contact: Project students show working on the project. All students missupervisor, and attend fortnightly mee Most of their time will be spent working independent fashion, though with the supervisor face to face or electronically project students are encouraged to att seminars.  Scheduled learning: 28 hours  As defined by QAA: Written Examinations = 0%, Practical E  As used by St Andrews: Coursework (review essay, report, orange of the project of the p			

### **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						
	SCOTCAT Credits: 20 SCQF Level 9 Semester: 2					
	Academic year:	2016/7 & 2017/				
	Planned timetable:	Lectures: 11.00 am Mon, Tue and Wed Practicals: to be arranged.				

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.

Programme module type:	Compulsory for Neuroscience.  Optional for Biochemistry, Biomolecular Science, Molecular Biology, Cell Biology, Biology and all Biology Joint or Major/Minor (i.e. 'with') and				
	Psychology 'with' Degree program	ıme	·S.		
Pre-requisite(s):	BL2101 or BL2104 Anti-requisite(s): BL3312				
Learning and teaching methods and delivery:	<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.				
	Scheduled learning: 32 hours		Guided indepen	dent study: 165 hours	
Assessment pattern:	As defined by QAA:				
	Written Examinations = 60%, Prac	tica	I Examinations =	0%, Coursework = 40%	
	As used by St Andrews:				
	3-hour Written Examination = 60%	%, C	oursework = 40%		
Re-Assessment pattern:	3-hour Written Examination = 100%				
Module Co-ordinator:	Dr G Doherty				
Lecturer(s)/Tutor(s):	Dr A Butler, Dr G Doherty, Dr G B Spencer, Dr L Aitken	Mile	es, Dr G Prescott,	Dr R Ramsay, Dr K	

Planned timetable:

## PN3313 Neuroscience SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 & 2017/8

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.

Lectures: 12.00 am Mon, Tue and Wed Practicals: to be arranged.

Programme module type:	Compulsory for Neuroscience.  Optional for Behavioural Biology, Cell Biology, Evolutionary Biology, Zoology and all Biology Joint or Major/Minor (i.e. 'with') and Psychology 'with' Degree					
	programmes.	•	,	, 0,		
Pre-requisite(s):	BL2101	An	ti-requisite(s):	BL3313		
Required for:	PN4230, PN4231, BL4232, PN4234	4, P <b>i</b>	N4235			
Learning and teaching methods and delivery:	<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.					
	Scheduled learning: 39 hours Guided independent study: 161 hours					
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%					
	As used by St Andrews:					
	3-hour Written Examination = 60%	%, C	oursework = 40%			
Re-Assessment pattern:	3-hour Written Examination = 100%					
Module Co-ordinator:	Dr G Miles					
Lecturer(s)/Tutor(s):	Prof F Gunn-Moore, Prof K Sillar, Dr S Pulver, Dr G Miles, Dr W Heitler, Dr W Li, Dr G Doherty					

PN4230	PN4230 Neurodegeneration and Aging							
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1			
	Academic year:	restrictions: BSc Hons Neuroscience students have priority on this module						
	Availability restrictions:							
	Planned timetable:							

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.

Programme module type:	Optional for Biochemistry, Cell Biology, Molecular Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor (i.e. 'with') and Psychology 'with' Degree programmes.				
Anti-requisite(s):	BL4230				
Learning and teaching methods and delivery:	<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.				
	Scheduled learning: 24 hours Guided independent study: 126 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 66%, Practical Examinations = 25%, Coursework = 34%				
	As used by St Andrews:  2-hour Written Examination = 66%, Coursework = 34%				
Re-Assessment pattern:	2-hour Written Examination = 100%				
Module Co-ordinator:	Dr G Doherty				
Lecturer(s)/Tutor(s):	Prof F Gunn-Moore, Dr G Doherty, Dr	r M Andrews			

to be arranged.

# PN4231 Neuromodulation SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: BSc Hons Neuroscience students have priority on this module Planned timetable: Lectures: 11.00 am - 12.00 noon Tue and 10.00 am - 11.00 am Fri. Practicals

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.

Programme module type:	Optional for Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor (i.e. 'with') and Psychology 'with' Degree programmes.					
Pre-requisite(s):	PN3313	Anti-requisite(s): BL4231				
Learning and teaching	Weekly contact: 2 seminars.		·			
methods and delivery:	Scheduled learning: 24 hours	Guided inde	pendent study: 126 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 25%, Coursework = 25%					
	As used by St Andrews:  1-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	1-hour Written Examination = 100%					
Module Co-ordinator:	Dr S Pulver					
Lecturer(s)/Tutor(s):	Dr S Pulver, Prof K Sillar, Dr G Miles, Dr W Li, Dr W Heitler					

# PN4234 Synaptic Transmission SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: BSc Hons Neuroscience students have priority on this module Planned timetable: Lectures: 11.00 am -12:30 pm Wed and 12.00 noon -1.00 pm Fri. Practicals to be arranged.

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.

Programme module type:	Optional for Behavioural Biology, Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor (i.e. 'with') and Psychology 'with' Degree programmes.					
Pre-requisite(s):	PN3313 Anti-requisite(s): BL4234					
Learning and teaching methods and delivery:	<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					
	Scheduled learning: 22 hours Guided independent study: 128 hours					
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%					
	As used by St Andrews:  2-hour Written Examination = 60%, Coursework = 40%					
Re-Assessment pattern:	2-hour Written Examination = 100%					
Module Co-ordinator:	Dr W Li					
Lecturer(s)/Tutor(s):	Dr W Li, Dr S Pulver, Dr G Miles					

Motoneurons: From Physiology to Pathology							
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1			
Academic year:	2016/7 & 2017/8						
Availability restrictions:	BSc Hons Neuros	BSc Hons Neuroscience students have priority on this module					
Planned timetable:	Lectures : 2.00 pr arranged.	Lectures : 2.00 pm - 3.00 pm Mon and 9.00 am - 10.30 am Fri. Practicals to be arranged.					
by focussing on one of the mo motoneurons. The module w genetics controlling motoneu	o provide in depth knowledge of key aspects of neuronal function and potential dysfunction of the most studied and best characterised classes of neurons in the central nervous system, module will cover topics such as: the history of motoneurons in neuroscience research; the g motoneuron development, the intrinsic electrical properties of motoneurons; synaptic motoneurons; motoneuron recruitment; and motoneuron disease.						
Programme module type:	Optional for Behavioural Biology, Cell Biology, Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor (i.e. 'with') and Psychology 'with' Degree programmes.						
Pre-requisite(s):	PN3313		Anti-requisite(s):	BL4235			
Learning and teaching methods and delivery:	Weekly contact: practical over the		rs, 6 hours of lecture	s and 6 hours of			
	Scheduled learni	ng: 22 hours	Guided independ	dent study: 128 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%						
	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%						
Re-Assessment pattern:	2-hour Written E	xamination = 100%					
Module Co-ordinator:	Dr G Miles						

Lecturer(s)/Tutor(s):

PN4235

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	SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year			
	Academic year:	2016/7 & 2017/8						
	Planned timetable:	To be arranged with the supervisor.						

Dr W Li, Prof K Sillar, Dr G Miles, Dr W Heitler

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.

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Programme module type:	PN4299 or BL4200 is compulsory for Neuroscience.					
Anti-requisite(s):	BL4200, BL4201, PS4050, PS4299					
Learning and teaching	Weekly contact: Meetings with supervisor					
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 567 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 35%, Coursework = 65%					
	As used by St Andrews: Practical Examination = 35%, Coursework = 65%					
Re-Assessment pattern:	Practical Examination = 35%, Coursework = 65% re-assessment may include collecting further data					
Module Co-ordinator:	Dr G H Doherty					
Lecturer(s)/Tutor(s):	Individual Supervisors across the School of Psychology and Neuroscience or the School of Biology					

## Psychology (PS) modules

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

esearch Design and Ana	lucic 1					
SCOTCAT Credits:	15	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Not available to General Degree Students.					
Planned timetable:	Lectures: 9-11.0	0 am Mon. 1-hour բ	oractical: one of Mo	on 1-2, 2-3, 3-4, 4-5		
This module is designed to p the foundations for indeper Honours programme. Emph understanding of the under such as ethical issues in rese	ndent empirical re nasis will be plac lying philosophy	esearch and critical ed on the acquisit that guides resear	analysis required tion of design and ch. The syllabus wi	in the final year of the analysis skills and an ill include core aspects		
Programme module type:	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.					
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser					
Required for:	PS3022					
Learning and teaching methods and delivery:	Weekly contact seminar.	: 1 x 2-hour lecture	and 1 x 1-hour labo	oratory/tutorial class or		
	Scheduled learn	ing: 33 hours	Guided indepen	dent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 25%, Practical Examinations = 0%, Coursework = 75%					
	As used by St Air 1-hour Written I	ndrews: Examination = 25%,	Coursework = 75%			
Re-Assessment pattern:		1-hour Written Examination = 25%, Coursework = 75%, Re-assessment applies to failed components only				

Dr M W Oram

Dr M W Oram

## PS3022 Research Design and Analysis 2 **SCOTCAT Credits:** SCQF Level 9 2 Semester: Academic year: 2016/7 & 2017/8 **Availability restrictions:** Not available to General Degree Students. Planned timetable: Lectures 9-11.00 am Mon. 1-hour practical: two of Mon 1-2, 2-3, 3-4, 4-5 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. Programme module type: 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. Pre-requisite(s): PS3021, Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser Learning and teaching Weekly contact: 1 X 2-hour lecture (weeks 1-11) and 2 X 1 hour methods and delivery: laboratory/tutorial (weeks 1-10) Scheduled learning: 42 hours Guided independent study: 108 hours Assessment pattern: As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60% As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60% Re-Assessment pattern: 2-hour Written Examination = 40%, Coursework = 60%, Re-assessment applies to failed components only **Module Co-ordinator:** Dr K Mavor Lecturer(s)/Tutor(s): Dr K Mavor, Dr S Pehrson, P Gardner

onceptual Issues and The	oretical Perspe	ctives			
SCOTCAT Credits:	10	SCQF Level 9	Semester:	1	
Academic year:	2016/7 & 2017/8	3			
Availability restrictions:	Available to Gene Adviser	eral Degree student	s with permission of	the Psychology Honour	
Planned timetable:	Lectures: 9.00-11.00 am Thu. 1-hour practical: one of Thu 2-3, 3-4, 4-5. (Module runs in weeks 1-5 only)				
This module addresses the module will be taught via lect development of critical analy relate conceptual debates in	tures and seminars rsis of alternative m	including student p nodels and levels of	resentations. Emph	asis will be placed on th	
Programme module type:	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography.  Compulsory for BPS Recognition.				
Pre-requisite(s):	PS2001 and PS2002				
Learning and teaching methods and delivery:	Weekly contact: (Weeks 1 - 5).	1 x 2-hour lecture a	nd 1 x 1-hour labora	tory class or seminar	
	Scheduled learni	ng: 15 hours	Guided indepen	dent study: 85 hours	
Assessment pattern:	As defined by QA	NA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St An	drews:			
	Coursework = 10	0%			
Re-Assessment pattern:	Coursework = 10	0%			
•					
Module Co-ordinator:	Mr P L Gardner				

PS3032 Assessment in Clinical Psyc	chology						
SCOTCAT Credits:	10	SCQF Level 9	Semester:	2			
Academic year:	2016/7 & 2017/8						
Availability restrictions:	Available to General Degree students with permission of the Psychology Honours Adviser						
Planned timetable:	Lectures: 9-11.00 am Thu. 1-hour practical: one of Thu 2-3, 3-4, 4-5. (Module runs in weeks 6-10 only).						
neuronal and/or cognitive-be and/or clinical neuropsychologassess psychopathological	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 be demonstrating how to use these tools in clinical and experimental settings.						
Programme module type:	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.  Compulsory for BPS Recognition.						
Pre-requisite(s):	PS2001 and PS20	002					
Learning and teaching methods and delivery:	Weekly contact: (Weeks 6 - 10).	1 x 2-hour lecture ar	nd 1 x 1-hour labora	tory class or seminar			
	Scheduled learni	ng: 15 hours	Guided independ	dent study: 85 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%						
	As used by St Andrews:						
	1.5-hour Written Examination = 100%						
Re-Assessment pattern:	1.5-hour Written	Examination = 100%	6				
Module Co-ordinator:	Dr D Balslev						
Lecturer(s)/Tutor(s):	Dr D Balslev						

Developmental Psychology						
SCOTCAT Credits:	10	SCQF Level 9	Semester:	2		
Academic year:	2016/7 & 2017/	2016/7 & 2017/8				
Availability restrictions:		Available to General Degree students with permission of the Psychology Honours Adviser				
Planned timetable:		00 am Thu. 1.5-hour weeks 1 – 5 only)	practical: Thu, eith	ner 2-3:30 or 3:30-5.		
discoveries in developmenta that are a particular strengt	equip students with an appreciation of key principles, concepts, methods and all psychology, with an emphasis on evolutionary and comparative perspectives the of such work in St Andrews. The module aims to offer a broad perspective od, and a range of key topics in cognitive and social development.					
Programme module type:	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.  Compulsory for BPS Recognition.					
Pre-requisite(s):	PS2001 and PS2002 Anti-requisite(s): PS3010 and PS3011					
Learning and teaching methods and delivery:	Weekly contact seminar (Weeks	: 1 x 2-hour lecture 1 - 5).	and 1 x 1.5-hour la	boratory class or		
	Scheduled learn	ing: 18 hours	Guided indepen	ident study: 82 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	Coursework = 10	00%				
Module Co-ordinator:	Dr E Robbins					
	Dr E Robbins					

PS3034 Social Psychology	3034 Social Psychology					
SCOTCAT Credits:	10	SCQF Level 9	Semester:	2		
Academic year:	2016/7 & 2017/	8				
Availability restrictions:	Available to Gen Honours Advise	eral Degree studen	ts with permission	of the Psychology		
Planned timetable:	Lectures 9-11.00 runs in weeks 1		actical: one of Tue 2	2-3, 3-4, 4-5 (Module		
research approaches will be this field. Approaches that	examined in order will be covered the case, the street	th key topics across the breadth of social psychological enquiry. A variety of examined in order to develop the scientific understanding and critical skills in will be covered include social cognition, social identity and the study of a case, the strengths and limitations of the approaches are explored, and blinked to current events.				
Programme module type:	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography.  Compulsory for BPS Recognition.					
Pre-requisite(s):	PS2001 and PS2002					
Learning and teaching methods and delivery:	Weekly contact (Weeks 1 - 5)	: 1 x 2-hour lecture	and 1 x 1-hour labo	ratory class or seminar		
	Scheduled learn	ing: 15 hours	Guided indepen	dent study: 85 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
	As used by St Andrews: Coursework = 100%					
Re-Assessment pattern:	Coursework = 10	00%				
Module Co-ordinator:	Dr N Tausch					
Lecturer(s)/Tutor(s):	Dr N Tausch					

gnitive and Behavioura	l Neuroscience				
SCOTCAT Credits:	10	SCQF Level 9	Semester:	1	
Academic year:	2016/7 & 2017/	/8	•	•	
Availability restrictions:	Available to Ger Adviser	neral Degree stude	nts with permission	of the Psychology Honours	
Planned timetable:	Lectures 9-11.00 in weeks 1 – 5 c		ractical: one of Tue	2-3, 3-4, 4-5 (Module runs	
This module aims to provid concerned with the biologic analysis of molecular and sy relationship between cogni examined.	al bases of behave naptic events, sin	viour. Emphasis wi gle cell studies, br	II be laid on basic on activity scans, a	experimental science fron nd clinical studies, and the	
Programme module type:	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. PS2001 and PS2002				
Pre-requisite(s):					
Learning and teaching methods and delivery:	Weekly contact (Weeks 1 - 5)	t: 1 x 2-hour lecture	and 1 x 1-hour labo	oratory class or seminar	
	Scheduled learn	ning: 15 hours	Guided indep	endent study: 85 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews: 1.5-hour Written Examination = 100%				
Re-Assessment pattern:	1.5-hour Writte	n Examination = 10	0%		
Module Co-ordinator:	Dr I Jentzsch				
Lecturer(s)/Tutor(s):	Dr I Jentzsch				

SCOTCAT Credits:	10	SCQF Level 9	Semester:	2	
Academic year:	2016/7 & 2017/8	3			
Availability restrictions:	Available to General Degree students with permission of the Psychology Ho Adviser				
Planned timetable:		Lectures 9-11.00 am Tue. 1.5-hour practical: one of Tue 2-3:30, 3:30-5pm. (Module runs in weeks 6 – 10 only).			
This module will address evunderstanding of major evon psychology. Key principles, c such as the evolution of social	lutionary forces a oncepts and meth-	nd how they have odologies will be in	shaped animal and troduced and relate	d human behaviour an ed to specific topic area	
Programme module type:	Compulsory for 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.				
Pre-requisite(s):	PS2001 and PS20	002			
Learning and teaching methods and delivery:	Weekly contact: (Weeks 6 - 10).	1 x 2-hour lecture a	nd 1 x 1.5-hour labo	ratory class or seminar	
	Scheduled learni	ng: 18 hours	Guided indepen	dent study: 82 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	As used by St An	drews:			
	I -	<b>drews:</b> at Written Examinat	ion (in 2 hour slot)=	100%	
Re-Assessment pattern:	Take-home form		• • • • • • • • • • • • • • • • • • • •	100%	
Re-Assessment pattern: Module Co-ordinator:	Take-home form	at Written Examinat	• • • • • • • • • • • • • • • • • • • •	100%	

erception						
SCOTCAT Credits:	10 SCQF Level 9 Semester: 1					
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Available to General Degree students with permission of the Psychology Honours Adviser					
Planned timetable:	Lectures 9-11.00am Tue. Four 1.5-hour practical: one of Tue 2-3:30, 3:30-5pm. (Module runs in weeks 7–11 only).					
	SCOTCAT Credits: Academic year: Availability restrictions:	SCOTCAT Credits: 10  Academic year: 2016/7 & 2017/  Availability restrictions: Available to Gen Honours Advised  Planned timetable: Lectures 9-11.00	SCOTCAT Credits: 10 SCQF Level 9  Academic year: 2016/7 & 2017/8  Availability restrictions: Available to General Degree studen Honours Adviser  Planned timetable: Lectures 9-11.00am Tue. Four 1.5-h	SCOTCAT Credits: 10 SCQF Level 9 Semester:  Academic year: 2016/7 & 2017/8  Availability restrictions: Available to General Degree students with permission Honours Adviser  Planned timetable: Lectures 9-11.00am Tue. Four 1.5-hour practical: one of		

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 experimental psychology. 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.

Programme module type:	Compulsory for Neuroscience, Single Honours Psychology.  Either PS3037 or PS3038 (normally PS3038) is compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.				
Pre-requisite(s):	PS2001 and PS2002				
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 2-hour lecture and 1 x 1.5-hour laboratory class or seminar for 4 weeks (Weeks 7 - 11).				
	Scheduled learning: 16 hours Guided independent study: 84 hours				
Assessment pattern:	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%				
	As used by St Andrews:				
	1.5-hour Written Examination = 100%				
Re-Assessment pattern:	1.5-hour Written Examination = 100%				
Module Co-ordinator:	Prof J Harris				
Lecturer(s)/Tutor(s):	Prof J Harris				

PS3037

Cognition						
SCOTCAT Credits:	10	SCQF Level 9	Semester:	1		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Available to General Degree students with permission of the Psychology Honours Adviser					
Planned timetable:	Lectures: 9-11.00 am Thu. 1-hour practical: one of Thu 2-3, 3-4, 4-5. (Module runs in weeks 7 – 11 only).					
include, for example, attent development of the skill of practical classes, in which s	develop an understanding of human cognitive processes. Topic areas covered ion, memory, reasoning, and decision making. Emphasis will be placed on the critical evaluation of evidence and theory. Lectures will be accompanied by tudents will gain experience of the experimental methods used in cognitive nich research papers will be critically evaluated.					
Programme module type:	Compulsory for	Neuroscience Singl	A Honours Psychol	Ogv		

research, and seminars in which research papers will be entiredily evaluated.					
Programme module type:	Compulsory for Neuroscience, Single	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.				
Pre-requisite(s):	PS2001 and PS2002				
Learning and teaching methods and delivery:	Weekly contact: 1 x 2-hour lecture and 1 x 1-hour laboratory class or seminar (Weeks 7 - 11).				
	Scheduled learning: 15 hours Guided independent study: 85 hours				
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	Coursework = 100%				
Module Co-ordinator:	Dr T Otto				
Lecturer(s)/Tutor(s):	Dr T Otto				

## PS4040 Psychology Review SCOTCAT Credits: 10 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in a Psychology Honours Programme. Planned timetable: 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 4,000 words.

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Programme module type:	Compulsory for Single Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography.				
	Compulsory for BPS Recognition.				
	Optional for Joint Honours Psycholog	y without BPS recognition			
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser				
Co-requisite(s):	PS3021 and PS3022. This module is normally completed in the first year of the Honours Programme.				
Learning and teaching	Weekly contact: Individual supervision by pre-assigned member of staff.				
methods and delivery:	Scheduled learning: 10 hours	Guided independent study: 90 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
	As used by St Andrews:				
	Review = 100%				
Re-Assessment pattern:	Coursework = 100%				
Module Co-ordinator:	Dr R Sprengelmeyer				
Lecturer(s)/Tutor(s):	Dr R Sprengelmeyer				

# PS4050 Psychology Project (30) SCOTCAT Credits: 30 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours Programme Planned timetable: Not applicable.

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.

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Programme module type:	PS4050 or PS4299 or PS4796 or PS4797 or PN4299 is compulsory for Single Honours Psychology.				
	PS4050 or PS4796 is compulsory for J recognition.	loint Honours Psychology with BPS			
	BL4200 or PS4050 or <i>PS4796 - PS479</i> Biology.	7 is compulsory for Psychology with			
Pre-requisite(s):	PS4040, PS3021 and PS3022. Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser				
Anti-requisite(s):	BL4200, PN4299, PS4299, PS4796, PS4797				
Learning and teaching	Weekly contact: Individual supervision by pre-assigned member of staff				
methods and delivery:	Scheduled learning: 30 hours	Guided independent study: 270 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical	Examinations = 0%, Coursework = 100%			
	As used by St Andrews:				
	Dissertation = 100%				
Re-Assessment pattern:	Dissertation = 100% Re-assessment may include collecting further data				
Module Co-ordinator:	Dr R Sprengelmeyer				
Lecturer(s)/Tutor(s):	Dr R Sprengelmeyer				

## PS4060 Review Essay SCOTCAT Credits: 15 SCQF Level 10 Semester: Whole Year Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: To be arranged.

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.

Programme module type:	Compulsory for Single Honours Psychology.				
	Optional for Joint Honours Psycholog with Film Studies, Psychology with G	y, Psychology with Biology, Psychology eography, Neuroscience.			
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser				
Anti-requisite(s):	BL4200, PN4299, PS4299				
Learning and teaching	Weekly contact: 3 x 2-hour workshops in Semester 1				
methods and delivery:	Scheduled learning: 6 hours	Guided independent study: 144 hours			
Assessment pattern:	As defined by QAA:				
	Written Examinations = 0%, Practical	Examinations = 0%, Coursework = 100%			
	As used by St Andrews:				
	Coursework = 100%				
Re-Assessment pattern:	Coursework = 100%				
Module Co-ordinator:	Dr E M Bowman				
Lecturer(s)/Tutor(s):	TBC				

PS4069 Group Behaviour						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Available only to students in the second year of the Honours Programme.				
	Planned timetable:	To be arranged				

This module aims to develop an advanced understanding of selected topics relating to the psychology of groups and collective behaviour. It will address how behaviour is affected by the group context and examine the psychological mechanisms which shape how people act as group members. Teaching will be seminar based and students will be expected to read independently and contribute actively to sessions. Emphasis will be placed on the development of critical skills and the ability to relate individual studies and theories to broader conceptual debates in social psychology. More detailed module content will be announced in advance of student choices.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminar plus tutorial time.  Scheduled learning: 33 hours  Guided independent study: 117 hours		
methods and delivery:			
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 75%, Coursework = 25%		
Re-Assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only		
Module Co-ordinator:	Prof S Reicher		
Lecturer(s)/Tutor(s):	Prof S Reicher		

## PS4071 Behavioural Neuroscience SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 11.00 am - 1.00 pm Thu

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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching			
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 75%, Coursework = 25%		
Re-Assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only		
Module Co-ordinator:	Dr E M Bowman		
Lecturer(s)/Tutor(s):	Dr E M Bowman		

## PS4074 Cognitive Psychology and the Emotional Disorders SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours Programme.

9.00 am - 11.00 am Mon

Planned timetable:

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.

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Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminars plu	us office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 75%, (	Coursework = 25%	
Re-Assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only		
Module Co-ordinator:	Dr B Dritschel		
Lecturer(s)/Tutor(s):	Dr B Dritschel		

PS4079 Sex Differences and Gender Development						
	SCOTCAT Credits:	15 SCQF Level 10 Semester: 2				
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Available only to students in the second year of the Honours Programme				
	Planned timetable:	11.00 am - 1.00 pm Fri				

This advanced-level module will examine the evidence for sex differences in human behaviour and explore how gender develops across the lifespan. Students will learn how hormones, such as testosterone and estrogen, influence brain function and behaviour in non-human animals and will apply this knowledge to human data. Example topics include sexual behaviour (including sexual orientation), aggression, memory, sex differences in mental health, and the evolution of sex differences. Teaching will be based on student-led seminars with supporting lectures. Emphasis will be placed on critical evaluation and the ability to relate scientific data to broader debates regarding sex differences in behaviour.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminar plus	office hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr G Brown		
Lecturer(s)/Tutor(s):	Dr G Brown		

# PS4083 Psychology of Music SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminars plu	us office hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	2-hour Written Examination = 75%, Coursework = 25%		
Re-Assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only		
Module Co-ordinator:	Dr I Jentzsch		
Lecturer(s)/Tutor(s):	Dr I Jentzsch		

PS4084 Psychology of Art: Aesthetics and Individual Differences in Visual Function					
	SCOTCAT Credits:	15 SCQF Level 10 Semester: 2			
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	Available only to students in the second year of the Honours Programme.			
•	Planned timetable:	11.00 am - 1.00 pm Wed			

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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminars plu	s office hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 11		
Assessment pattern:	As defined by QAA:  Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr D Vishwanath		
Lecturer(s)/Tutor(s):	Dr D Vishwanath		

## PS4085 Evolution and Development of Social and Technical Intelligence SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminars plu	us office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr D Vishwanath		
Lecturer(s)/Tutor(s):	Dr D Vishwanath		

# PS4086 Origins and Evolution of Mind Reading (Theory of Mind) SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to undergraduate students in the second year of the Honours Programme. Also available to postgraduate students on MSc in Evolutionary and Comparative Pyschology: the Origins of Mind Planned timetable: 9.00 am - 11.00 am Fri

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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminars plu	us office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews: 2-hour Written Examination = 75%, Coursework = 25%		
Re-Assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only		
Module Co-ordinator:	Dr J-C Gomez		
Lecturer(s)/Tutor(s):	Dr J-C Gomez		

	PS4089 Neural Basis of Episodic Memory					
		SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:		2016/7 & 2017/	8			

Availability restrictions: Available only to students in the second year of the Honours Programme

Planned timetable: 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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 2-hour seminars plus office hour.		
methods and delivery:	ivery: Scheduled learning: 33 hours Guided independent study:		
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews:		
	Written Take Home Examination = 75	5%, Coursework = 25%	
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr J A Ainge		
Lecturer(s)/Tutor(s):	Dr J A Ainge		

## PS4090 Face Perception and Human Attraction SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 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.

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Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience.		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 0.5-hour lectures, 1.5-hour seminars and 1-hour office hour throughout the semester.		
	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Prof D Perrett		
Lecturer(s)/Tutor(s):	Prof D Perrett		

PS4091 Computer-aided Research						
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1	
	Academic year:	2016/7 Available only to students in the second year of the Honours Programme.				
	Availability restrictions:					

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.

Programme module type:	Optional for Single and Joint Honours Psychology, and Neuroscience.		
Pre-requisite(s):	PS3021, PS3022 and Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 1 lecture and 1 sem	inar plus office hour.	
methods and delivery:	Scheduled learning: 33 hours Guided independent study: 117 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr T Otto		
Lecturer(s)/Tutor(s):	Dr T Otto		

Planned timetable:

## PS4093 The Psychology of Dementia SCOTCAT Credits: 15 SCQF Level 10 Semester: 1 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours programme Planned timetable: 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.

Programme module type:	Optional for S ingle and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching	Weekly contact: 1 lecture, 1 seminar	plus office hour.	
methods and delivery:	Scheduled learning: 33 hours	Guided independent study: 117 hours	
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr M Ellis		
Lecturer(s)/Tutor(s):	Dr M Ellis		

ł C	Communicating Psychology and Neuroscience						
	SCOTCAT Credits:	15 SCQF Level 10 Semester: 2					
	Academic year:	2016/7 & 2017/8					
	Availability restrictions:	Available only to students in the second year of the Honours programme					
	Planned timetable:	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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	PS3021 or PN3313. Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Anti-requisite(s):	ID4001 and ID4002		
Learning and teaching	Weekly contact: 2-hour lecture, plus	office hour and occasional fieldwork.	
methods and delivery:	ods and delivery: Scheduled learning: 42 hours Guided independent study		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr K Spencer		
Lecturer(s)/Tutor(s):	Dr K Spencer, Mr P L Gardner		

PS4094

2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to

### **PS4095 Psychopathology SCOTCAT Credits:** 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Available only to students in the second year of the Honours programme **Availability restrictions:** Planned timetable: 9.00 am - 11.00 am Mon 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). Optional for Single and Joint Honours Psychology, Psychology with Biology, Programme module type: Psychology with Film Studies, Psychology with Geography, Neuroscience Pre-requisite(s): Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser Learning and teaching Weekly contact: 2-hour lecture plus office hour. methods and delivery: Scheduled learning: 33 hours Guided independent study: 117 hours Assessment pattern: As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50% As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%

PS4096 N	PS4096 Mechanisms of Behaviour: integrating psychological and neuroscience perspectives					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	2	
	Academic year:	2016/7 & 2017/8				
	Availability restrictions:	Available only to students in the second year of the Honours programme				
	Planned timetable:	12.00 noon - 2.00 pm Tue				

failed components only

Dr R Sprengelmeyer

Dr R Sprengelmeyer

Re-Assessment pattern:

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

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.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience		
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 2-hour lecture (x 10 weeks), 1 practical class ( x 4 weeks) plus office hour.		
	Scheduled learning: 35 hours Guided independent study: 115 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical E	xaminations = 15%, Coursework = 85%	
	As used by St Andrews:		
	Coursework (including presentation) = 100%		
Re-Assessment pattern:	Coursework = 100%		
Module Co-ordinator:	Dr K Spencer		
Lecturer(s)/Tutor(s):	Dr K Spencer		

**Module Co-ordinator:** 

Lecturer(s)/Tutor(s):

## **PS4097 Research Methods in Cognitive Neuroscience SCOTCAT Credits:** SCQF Level 10 Semester: 2 **Academic year:** 2016/7 & 2017/8 Available only to students in the second year of the Honours programme **Availability restrictions:** Planned timetable: 9.00 am - 11.00 am Tue Tremendous progress in technology allows now to observe the brain in action to understand the physical bases of behaviour. This module showcases this state of the art approach. Guided by a team of lecturers with first-hand expertise in trans cranial magnetic stimulation, neurophysiology, electrophysiology, behavioural modelling, neuropsychology and functional magnetic resonance imaging the students will develop their ability to evaluate and propose cutting edge research. The course includes lectures and student led discussions of current research topics. Programme module type: Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience Average grade of 11 or better in PS2001 and PS2002 from the first sitting or Pre-requisite(s): permission of the Psychology Honours Adviser Learning and teaching Weekly contact: 1 lecture, 1 seminar plus office hour. methods and delivery: **Scheduled learning:** 33 hours Guided independent study: 117 hours Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews: Coursework = 100% Re-Assessment pattern: Coursework = 100%

Dr D Balslev, Dr T Otto, Dr J Ales, Dr G Miles

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PS4100 The Psychology of Terror	The Psychology of Terrorism					
SCOTCAT Credits:	15	SCQF Level 10	Semester:	1		
Academic year:	2016/7 & 2017/	8				
Availability restrictions:	Available only to	students in the sec	cond year of the Ho	nours programme		
Planned timetable:	9.00 am - 11.00	am Fri				
perspectives. The course we discuss the strategic logic processes involved in the ratio of the module will examinate the course of the	respectives. The course will assess individual- and group-/structural-level explanations of terrorism, scuss the strategic logic and moral justification of terrorism, and cover some of the psychological ocesses involved in the radicalisation of individuals and the operation of terrorist groups. The final part the module will examine the effects of terrorism on constituencies and target groups and the applications of psychological insights for counter-terrorism measures.					
Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience					
Pre-requisite(s):		of 11 or better in PS oe Psychology Hono		om the first sitting or		
Learning and teaching	Weekly contact: 2 hour lecture plus office hour.					
methods and delivery:	Scheduled learn	ing: 33 hours	Guided indepen	dent study: 117 hours		
Assessment pattern:	As defined by Q Written Examina		cal Examinations =	0%, Coursework = 50%		
	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%					
Re-Assessment pattern:	2-hour Written Examination = 50%, Coursework = 50%, Re-assessment applies to failed components only					
Module Co-ordinator:	Dr N Tausch	Dr N Tausch				
Lecturer(s)/Tutor(s):	Dr N Tausch	Dr N Tausch				

Dr D Balslev

## PS4101 Selves and Identities SCOTCAT Credits: 15 SCQF Level 10 Semester: 2 Academic year: 2016/7 & 2017/8 Availability restrictions: Available only to students in the second year of the Honours programme. Planned timetable: 11.00 am - 1.00 pm Thu

The central theme of the module is the balance between fluidity and stability in the way we define ourselves and others, personally and socially. This framing allows the possibility of exploring a range of important phenomena in personality and social psychology that are linked by that broad theme. The module is also intended to balance theoretical models of the self and social perception with practical outcomes like personal wellbeing and social change.

Programme module type:	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography, Neuroscience			
Pre-requisite(s):	Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser			
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 lecture, 1 seminar plus office hour. Plus 5 hours of practical classes over the semester.			
	Scheduled learning: 38 hours	Guided independent study: 112 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50% As used by St Andrews:			
	2-hour Written Examination = 50%, Coursework = 50%			
Re-Assessment pattern:	2-hour Written Examination = 50%, Coursework = 50%, Re-assessment applies to failed components only			
Module Co-ordinator:	Dr K Mavor	Dr K Mavor		
Lecturer(s)/Tutor(s):	Dr K Mavor			

## PS4299 Psychology Project (60)

SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Available only to students in the second year of the Honours programme			
Planned timetable:	To be arranged with the supervisor.			

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.

Programme module type:	Optional for Single Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography.		
Pre-requisite(s):	PS3021, PS3022 and PS4040. Average grade of 11 or better in PS2001 and PS2002 from the first sitting or permission of the Psychology Honours Adviser		
Anti-requisite(s):	BL4200, PS4050, PS4060, PS4796, PS4	797, PN4299	
Learning and teaching	Weekly contact: 1-hour individual supervision sessions.		
methods and delivery:	Scheduled learning: 20 hours	Guided independent study: 563 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework = 100%, Re-assessment may include collecting further data		
Module Co-ordinator:	Dr R Sprengelmeyer		
Lecturer(s)/Tutor(s):	various		

PS4796 Joint Project (30cr)	1796 Joint Project (30cr)					
SCOTCAT Credits:	30	SCQF Level 10	Semester:	Either or Whole Year		
Academic year:	2016/7 & 2017/8					
Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement.					
Planned timetable:	To be arranged.					
management and analysis. supervisors in order to de preparation.	The aim of the project is to develop and foster the skills of experimental design, appropriate research management and analysis. The topic and area of research should be chosen in consultation with the supervisors in order to determine that the student has access to sources as well as a clear plan of preparation.					
Programme module type:	Optional for all undergraduate degrees in the School of Psychology & Neuroscience.					
Pre-requisite(s):	A Letter of Agreement					
Learning and teaching methods and delivery:	Weekly contact: As per Letter of Agreement.					
Assessment pattern:	As per Letter of Agreement.					
Re-Assessment pattern:	As per Letter of Agreement.					
Module Co-ordinator:	As per Letter of Agreement.					

oint Project (60cr)				
SCOTCAT Credits:	60	SCQF Level 10	Semester:	Whole Year
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Available only to students in the Second year of the Honours Programme, who have completed the Letter of Agreement.			
Planned timetable:	To be arranged.			
•	lysis. The topic and area of research should be chosen in consultation with the o determine that the student has access to sources as well as a clear plan of pe:  Optional for all undergraduate degrees in the School of Psychology & Neuroscience.			
Pre-requisite(s):	A Letter of Agreement			
Learning and teaching methods and delivery:	Weekly contact: As per Letter of Agreement.			
Assessment pattern:	As per Letter of Agreement.			
Re-Assessment pattern:	As per Letter of Agreement.			
Module Co-ordinator:	As per Letter of Agreement.			

## **Interdisciplinary (ID) Modules**

ID4001 Communication and Teaching in Science					
	SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
	Academic year:	2016/7 & 2017/8			
	Availability restrictions:	Available only to final year students who have been accepted following application and interview in the preceding semester.			
	Planned timetable:	Flexible			

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.

Programme module type:	Optional for degrees in the Faculty of Science who meet the appropriate criteria.			
Learning and teaching methods and delivery:	Weekly contact: Occasional tutorials and a half-day training session.			
methods and denvery.	Scheduled learning: 30 hours Guided independent study: 12			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 55%, Coursework = 45%			
	As used by St Andrews:			
	Coursework = 100% comprising:			
	Written report on the placement (35%)			
	Teacher's assessment of student's placement (25%)			
	Oral presentation (30%)			
	Project proposal (10%)			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr B Sinclair			
Lecturer(s)/Tutor(s):	Dr A Naughton, Dr R Robinson, Dr F Gray, Dr J Wishart, Dr R Latham, Dr M Campbell, Dr B Sinclair, and visiting speakers			

## Interdisciplinary - Honours Level - 2016/7 - August 2016

SCOTCAT Credits:	15	SCQF Level 10	Semester:	1
Academic year:	2016/7 & 2017/8			
Availability restrictions:	Available only to students in the Schools of Classics, Divinity, English, Geography & Geosciences, History, International Relations, Modern Languages or Departments of Philosophy.			
Planned timetable:	To be arranged.	To be arranged.		
This module provides final y gain first hand experience or module will enable students working environment, and to	f education throu to gain substanti	gh a mentoring sch al experience of wo	neme with teacher orking in a challen	rs in local schools. The
Programme module type:		Optional for Classics, Divinity, English, Geography, History, International Relations, Modern Languages, Philosophy or Social Anthropology.		
Co-requisite(s):	If taken within Classics, Divinity, English, History, International Relations or Philosophy, a further 15-credit subject-specific module may be required.			
Learning and teaching methods and delivery:	<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.			
	during the seme	ir placement. 3 x 1-l	nour tutorials are h	neld at the University
	during the seme	ir placement. 3 x 1-lester. The module co	nour tutorials are honcludes with an o	neld at the University ral presentation
Assessment pattern:	during the seme session.  Scheduled learn As defined by Q	ir placement. 3 x 1-lester. The module coning: 28 hours	our tutorials are honcludes with an o	neld at the University ral presentation
Assessment pattern:	during the seme session.  Scheduled learn As defined by Q	ir placement. 3 x 1-lester. The module coning: 28 hours  AA: ations = 0%, Practical	our tutorials are honcludes with an o	neld at the University ral presentation
Assessment pattern:	during the seme session.  Scheduled learn As defined by Q Written Examina	ir placement. 3 x 1-lester. The module coning: 28 hours  AA: ations = 0%, Practice  andrews:	our tutorials are honcludes with an o	neld at the University ral presentation
Assessment pattern:	during the seme session.  Scheduled learn  As defined by Q Written Examin:  As used by St Ai Coursework = 10 Written project	ir placement. 3 x 1-lester. The module conting: 28 hours  AA: ations = 0%, Practication  addrews: 00% comprising: proposal (10%) + w	Guided indeperal Examinations = 3	neld at the University ral presentation  ndent study: 122 hou  80%, Coursework = 70
Assessment pattern:	during the seme session.  Scheduled learn  As defined by Q Written Examina  As used by St Ar Coursework = 10 Written project Oral presentation	ir placement. 3 x 1-lester. The module coning: 28 hours  AA: ations = 0%, Practications  O0% comprising: proposal (10%) + worn (at University, ass	Guided indeper al Examinations = 3	neld at the University ral presentation  ndent study: 122 hou  80%, Coursework = 70  1 = 45%  ecturers) = 30%
Assessment pattern:	during the seme session.  Scheduled learn  As defined by Q Written Examina  As used by St Ai Coursework = 10 Written project Oral presentation A further 25% of	ir placement. 3 x 1-lester. The module coning: 28 hours  AA: ations = 0%, Practications  O0% comprising: proposal (10%) + worn (at University, ass	Guided indeper  al Examinations = 3  ritten report (35%) sessed by module leading form of a report	neld at the University ral presentation  ndent study: 122 hours  80%, Coursework = 70  1 = 45%  ecturers) = 30%  by their placement-
Assessment pattern:  Re-Assessment pattern:	during the seme session.  Scheduled learn As defined by Q Written Examina As used by St Ai Coursework = 10 Written project Oral presentation A further 25% of mentor on the se	ir placement. 3 x 1-lester. The module coning: 28 hours  AA: ations = 0%, Practical ations = 0% (10%) + w on (at University, ass f Coursework is in the student's practical p	Guided indeper  al Examinations = 3  ritten report (35%) sessed by module leading form of a report	neld at the University ral presentation  ndent study: 122 hours  80%, Coursework = 70  1 = 45%  ecturers) = 30%  by their placement-
·	during the seme session.  Scheduled learn  As defined by Q Written Examina  As used by St Ai Coursework = 10 Written project Oral presentation A further 25% of mentor on the signal placement.	ir placement. 3 x 1-lester. The module coning: 28 hours  AA: ations = 0%, Practical ations = 0% (10%) + w on (at University, ass f Coursework is in the student's practical p	Guided indeper  al Examinations = 3  ritten report (35%) sessed by module leading form of a report	neld at the University ral presentation  ndent study: 122 hour  80%, Coursework = 70  1 = 45%  ecturers) = 30%  by their placement-

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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: http://www.st-andrews.ac.uk/printanddesign/dissertation/)

Programme module type:	Compulsory for BSc Honours programme in Biology and Geology			
Pre-requisite(s):	Admission to BSc Honours programme in Biology and Geology			
Learning and teaching methods and delivery:	Weekly contact: Individual supervision by member(s) of teaching staff			
memous and denvery.	Scheduled learning: 20 hours	Guided independent study: 430 hours		
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%			
	As used by St Andrews:			
	Research proposal = 5%, Oral Presentation = 10%, Dissertation = 85%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr S Mikhail and Dr T Raub			
Lecturer(s)/Tutor(s):	Dr T Raub			

ID5059 Knowledge Discovery and Datamining					
	SCOTCAT Credits:	15	SCQF Level 11	Semester:	2
	Academic year:	2016/7 & 2017/8			
	Planned timetable:	11.00 am Mon (odd weeks), Wed and Fri			

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.

Programme module type:	Optional for Computer Science BSc, Joint Computer Science degrees, Computer Science MSci			
Learning and teaching methods and delivery:	Weekly contact: Lectures, seminars, tutorials and practical classes.			
medious and deniety.	Scheduled learning: 35 hours Guided independent st			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	As used by St Andrews:			
Re-Assessment pattern:	2-hour Written Examination = 60%, Existing Coursework = 40%			
Module Co-ordinator:	masters-coord-cs@st-andrews.ac.uk			

Interdisciplinary - Honours Level - 2016/7 - August 2016