### **School of Geography & Sustainable Development**

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 permitted to enter the module.

### Geography (GG) modules

GG3100 Reconstructing Past Environments						
	SCOTCAT Credits:	20 SCQF Level 9 Semester: 1				
	Academic year:	2017/8 & 2018/9 Available every year.				
	Availability restrictions:					
	Planned timetable:	11.00 am - 1.00 pm Wed				

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):	(GG2011 and GG2012) or (SD2001 and SD2002)			
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 coordinator:	Dr K Roucoux			
Module teaching staff:	Various			

GG3201 Single Honours Research Design and Methodology Training (60)					
	SCOTCAT Credits:	60	SCQF Level 9	Semester:	2
Academic year: 2017/8					
	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				
Pre-requisite(s):	Passes at with an average of 11 or better in GG2011 and GG2012				
Anti-requisite(s):	GG3202 - GG3204, SG3201 - SG3204				
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 coordinator:	Dr R Streeter				
Module teaching staff:	Team taught				

### GG3202 Joint Honours Research Design and Methodology Training (30) SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2017/8 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:	Compulsory core for Joint Honours Geography One of GG3202 or GG3203 is compulsory for Geography with Persian, Geography with Social Anthropology, Geography with Spanish				
Pre-requisite(s):	Passes at with an average of 11 or better in GG2011 and GG2012	An	ti-requisite(s):	GG3201, GG3203, SG3201 - SG3204	
Required for:	GG4221, GG4222, GG4223, GG4224	4, G0	G4225, GG4297, G	GG4301	
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 coordinator:	Dr R Streeter				
Module teaching staff:	Team taught				

Research Design and Methodology Training (50)					
SCOTCAT Credits:	50	SCQF Level 9	Semester:	2	
Academic year:	2017/8 & 2018/9				
Availability restrictions:	Not available to G	eneral Degree Stud	lents.		
Planned timetable:	To be arranged.				
beyond graduation. It is d introducing them to the g generation of data. Student the units shared with the	dule occupies a central place in our field-based research-orientated degrees. It prepares students to ke their independent research dissertation and develops transferable professional skills useful graduation. It is designed to prepare students for undertaking original, empirical research by ing them to the general principles, methodologies, and methods used in the collection and on of data. Students need to make an informed choice, with the help of their Advisor, to select from s shared with the larger 60-credit SG3201. The module concludes with students producing an dent research proposal for their Senior Honours dissertation research.				
Programme module type:	One of GG3202 or GG3203 is compulsory for Geography with Persian, Geography with Social Anthropology, Geography with Spanish				
Pre-requisite(s):	Passes with an average of 11 or better in GG2011 and GG2012  Anti-requisite(s): GG3201, GG3202, SG3201 - SG3204, SD3203				
Required for:	GG4221, GG4222,	GG4223, GG4224,	GG4225, GG4298, G	GG4301	
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 8.5 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%				

No Re-assessment available

Dr R Streeter

Team taught

Re-assessment pattern:

Module coordinator:

Module teaching staff:

# GG3204 Research Design and Methodology Training (40) SCOTCAT Credits: 40 SCQF Level 9 Semester: 2 Academic year: 2017/8 & 2018/9 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 GG3201 - GG3204 is compulsory (Core) for Geography				
Pre-requisite(s):	Passes with an average of 11 or better in GG2011 and GG2012				
Anti-requisite(s):	GG3201 - GG3203, SG3201 - SG3204, SD3204				
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 E	xaminations = 0%, Coursework = 100%			
	As used by St Andrews:				
	Coursework = 100%				
Re-assessment pattern:	No Re-assessment available				
Module coordinator:	Dr R Streeter				
Module teaching staff:	Team taught				

### **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 Fri				

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):	(GG2011 and GG2012) or (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%, Co	ursework = 50%		
Re-assessment pattern:	2-hour Written Examination = 100%			
Module coordinator:	Dr M B Sothern			
Module teaching staff:	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: 9.00 am - 11.00 am 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):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 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%, Co	ursework = 50%	
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Dr M G Kesby		
Module teaching staff:	Dr M G Kesby		

GG3227 Colonial and Postcolonial Geographies							
	SCOTCAT Credits:	20 SCQF Level 9 Semester: 1					
	Academic year:	2018/9 Offered on a two-year cycle 9.00 am - 11.00 am Mon					
	Availability restrictions:						
	Planned timetable:						

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture, 1 x 1-hour seminar (x 10 weeks) + 2 x 1-hour feedback/revision sessions		
	Scheduled learning: 22 hours Guided independent study: 178 hours		
Assessment pattern: As defined by QAA:		5	
	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 coordinator:	Dr D W Clayton		
Module teaching staff:	Dr D W Clayton		

# GG3229 Environmental Management in Scotland SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2018/9 Availability restrictions: Offered on a two-year cycle. Planned timetable: 9.00 am - 11.00 am Tue

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Anti-requisite(s):	SG3229		
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 coordinator:	Dr C R Warren		
Module teaching staff:	Dr C R Warren		

## GG3232 Housing, Community and Social-Spatial Justice SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2018/9 Availability restrictions: Offered on a two-year cycle Planned timetable: 11.00 am - 1.00 pm Tue

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture, 1 x 1-hour seminar (x 10 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%, Co	oursework = 40%	
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Dr K McKee		
Module teaching staff:	Dr K McKee		

GG3234 Migration and Transnationalism					
SCOTCAT Credits: 20 SCQF Level 9 Semester: 1					
	Academic year:	2018/9 Offered on a two-year cycle 2.00 pm - 4.00 pm Fri			
	Availability restrictions:				
	Planned timetable:				

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		
Pre-requisite(s):	(GG2011 and GG2012) or (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 coordinator:	Dr D McCollum		
Module teaching staff:	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: 11.00 am - 1.00 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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	Weekly contact: 1 x 1-hour lecture (x 10 weeks) 1 x 1-hour seminar (x 10 weeks) 2 hours feedback and additional exam prep sessions		
	Scheduled learning: 22 hours Guided independent study: 178 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 coordinator:	Dr S Leahy		
Module teaching staff:	Dr S Leahy		

# GG3238 Development: voice, power and identity in global times SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2018/9 Availability restrictions: Offered on a two year cycle Planned timetable: 11.00 am - 1.00 pm Mon

This module focuses on how contemporary international development is changing. It examines how different development actors gain a voice and political prominence in contemporary development debates and policy making. While national governments, international donors and Non Government Organisations (NGOs) continue to influence development agendas, the global context for development is altering. The current moment is marked by shifting geopolitics and hyper mobility giving rise to new development agendas such as securitisation, religion and identity as well as a greater focus in global popular culture on individuals 'making a difference'. These changes create new opportunities for different actors to influence development. We will examine whether these groups and individuals 'do development differently' and ask who is excluded. Students will understand how they shape spaces locally, nationally and transnationally and will assess if this represents an alternative form of development.

Programme module type:	Optional for all degrees involving Geography		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	Weekly contact: 2-hour lecture (x 11 weeks), 1 hour seminar/workshop (x 11 weeks)		
	Scheduled learning: 33 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%, Co	ursework = 50%	
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Prof N Laurie		
Module teaching staff:	Prof N Laurie		

GG3239	GG3239 European Population Trends						
	SCOTCAT Credits:	redits: 20 SCQF Level 9 Semester: 1					
	Academic year:	2017/8					
	Availability restrictions: Offered on a two year cycle						
	Planned timetable:	10.00 am - 1.00 pm Mon					
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This module focuses on long-term European population trends. The fertility, mortality and migration dynamics of a representative cross-section of European countries are examined and competing explanations for demographic changes are discussed. The specific challenges that current population changes pose to public policy are also discussed.

Programme module type:	Optional for all degrees involving Geography		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching	Weekly contact: 2 hour lecture (x 11 w	Weekly contact: 2 hour lecture (x 11 weeks). 4 tutorials (x 4 weeks)	
methods and delivery:	Scheduled learning: 26 hours	Guided independent study: 176 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%, Co	ursework = 50%	
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Prof H Kulu		
Module teaching staff:	Prof H Kulu		

GG3240 Ice and climate					
	SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
	Academic year:	2017/8  Offered on a two year cycle  9.00 am - 11.00 am Mon			
	Availability restrictions:				
	Planned timetable:				

The growth and decay of the Earth's glaciers and ice sheets is one of the most dramatic consequences of climatic variability. Over the course of the Quaternary period (2.6 Ma ago to the present), vast ice sheets have regularly expanded to cover much of Europe and North America before rapidly wasting away in just a few thousand years. Understanding the causes and effects of these past changes is of great importance at present as anthropogenic climate change pushes the Earth into a new phase of major deglaciation. This module will begin by looking at the evidence for past glaciation and its influence on landscape development and modern land use. It will then look at what these past glacial periods can tell us about the threat to present day glaciers and ice sheets, including the likely rate and magnitude of deglaciation, the key mechanisms and feedbacks controlling these changes, and the critical interactions between the Earth's ice, oceans and climate.

Programme module type:	Optional for Geography		
Pre-requisite(s):	Entry to honours programme in Geography or Sustainable Development		
Learning and teaching methods and delivery:	<b>Weekly contact</b> : 1 x 1-hour lecture and 1 x 1-hour seminar (x 9 weeks), 1 x 2-hour practical (x 2 weeks), 1 x 1-day field trip		
	Scheduled learning: 34 hours Guided independent study: 166 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 coordinator:	Dr T Cowton		
Module teaching staff:	Dr T Cowton		

# GG3241 Quaternary Palaeoecology 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 Tue

This module examines the behaviour of organisms in response to climate changes on timescales of millenia and longer. Possible responses can be categorised as (i) evolution (by lineage splitting, or speciation, the source of biological diversity), (ii) extinction, or (iii) changes in distribution and abundance. The relative importance of these responses, and their relative frequency, are crucial for understanding the origin of biological diversity, its regionalisation (biogeography), and as a foundation for how organisms will respond with climate change in the future. The module will show the development of ideas in these areas, from the early nineteenth century onwards, through to current understanding, including recent developments in geography, Earth sciences and biology.

Programme module type:	Optional for Single Honours Geography or Biology and Geography Joint Honours			
Pre-requisite(s):	GG2011 and GG2012 (or SD2001 and SD2002 with permission of module coordinator)			
Learning and teaching	rearning and teaching nethods and delivery:  Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar.  Scheduled learning: 30 hours  Guided independent study: 160 hour			
methods and delivery:				
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%			
	As used by St Andrews:	As used by St Andrews:		
	Coursework = 100%			
Re-assessment pattern:	4,000-word essay on a subject to be decided between the student and the module co-ordinator = 100%			
Module coordinator:	Prof K Bennett			
Module teaching staff:	Prof K Bennett			

### **GG3262 Climate and Weather Systems**

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
Academic year:	2018/9			
Availability restrictions:	Offered on a two-year cycle.			
Planned timetable:	11.00 am - 1.00 pm Tue			

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
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 coordinator:	Prof D I Benn		
Module teaching staff:	Prof D I Benn		

### **GG3263 Glaciers and Glaciation**

SCOTCAT Credits:	20	SCQF Level 9	Semester:	1
Academic year:	2018/9			
Availability restrictions:	Offered on a two-year cycle.			
Planned timetable:	9.00 am - 11.00 am Wed			

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	Weekly contact: 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 coordinator:	Prof D I Benn		
Module teaching staff:	Prof D I Benn	·	

## GG3264 Oceans and Climate SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2018/9 Availability restrictions: Offered on a two-year cycle. Planned timetable: 9.00 am - 11.00 am Thu

The oceans play a key role in the global climate system. The aim of this module is to foster an understanding of: (1) changes in ocean circulation and climate, the possible mechanisms for such changes and the wider implications in terms of past, present and future global and regional climates; and (2) to provide an introduction to some of the research methods employed to determine oceanographic changes.

Programme module type:	Optional for all degrees involving Geography		
Pre-requisite(s):	(GG2011 and GG2012) or (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) + 1 x 1-hour revision session during the semester.		
	Scheduled learning: 23 hours Guided independent 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 coordinator:	Prof W E N Austin		
Module teaching staff:	Prof W E N Austin		

### **GG3271 Coastal Processes**

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	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 pı	m Tue		

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Anti-requisite(s):	GG3067		
Learning and teaching	Weekly contact: Weekly lectures.		
methods and delivery: Scheduled learning: 30 hours Guided independent		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%, Co	ursework = 40%	
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Prof W E N Austin		
Module teaching staff:	Prof W E N Austin		

# GG3272 Biogeography SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2018/9 Availability restrictions: Offered on a two-year cycle Planned timetable: 11.00 am - 1.00 pm Mon

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture, (X 10 weeks), 1-hour seminar (x 6 weeks) 2-hour workshops (x 4 weeks) and 6 hours of fieldwork		
	Scheduled learning: 30 hours	Guided independent study: 170 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:	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 coordinator:	Dr I Lawson		
Module teaching staff:	Dr I Lawson, Dr K Roucoux		

# GG3273 Scrutinising Segregation: Geographies of Diversity and Inequality SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2018/9 Availability restrictions: Offered on a two year cycle Planned timetable: 11.00 am - 1.00 pm Wed

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 coordinator:	Dr N Finney		
Module teaching staff:	Dr N Finney		

# GG3274 Socio-ecological Systems SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2017/8 Availability restrictions: Offered on a two-year cycle. Planned timetable: 9.00 am - 11.00 am Tue

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		
Pre-requisite(s):	(GG2011 and GG2012) or (SD2001 and SD2002)		
Anti-requisite(s):	SG3272		
Learning and teaching	Weekly contact: 1-hour lecture (x 10 weeks), 1-hour seminar (x 10 weeks).		
methods and delivery:	Scheduled learning: 20 hours Guided independent study: 176		
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 coordinator:	Dr A Davies		
Module teaching staff:	Dr A Davies and Dr R Streeter		

GG3301	GG3301 Special Topic for Joint or Major Honours in Geography (Junior Honours)						
	SCOTCAT Credits:	10 SCQF Level 9 Semester: 1					
	Academic year:	2017/8 & 2018/9	2017/8 & 2018/9				
	Availability restrictions:	Entry to a Joint or Major Honours programme in Geography.					
	Planned timetable:	To be arranged.					

This module is designed to allow Joint or Major Honours students in their Junior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment.

Programme module type:	Optional for Joint Honours Geography and all 'Geography with' degrees		
Pre-requisite(s):	GG2011 and GG2012		
Learning and teaching methods and delivery:	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.		
	Scheduled learning: 23 hours	Guided independent 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 coordinator:	Dr R Streeter		
Module teaching staff:	Various		

Special Topic for Honou	urs in Geography	y (Senior Honou	rs)	
SCOTCAT Credits:	10	SCQF Level 9	Semester:	1
Academic year:	2017/8 & 2018/9	2017/8 & 2018/9		
Availability restrictions:	Entry to a Joint or	Major Honours pro	gramme in Geogra	phy
Planned timetable:	To be arranged.			
This module is designed to a matter of a selected 20-cree across the four semesters of module but undertake a sep	dit optional module their Honours prog	in Geography (GG	3221 - GG3289) ye	t balance the workloa
Programme module type:	Optional for Joint Honours Geography, all 'Geography with' degrees and Single Honours students also taking ID4001 or ID4002.			
Pre-requisite(s):	GG2011 and GG20	012		
Required for:	Single Honours Ge	eography students a	lso taking ID4001 o	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 learning	ng: 23 hours	Guided indeper	ndent study: 77 hours
Assessment pattern:	As defined by QA Written Examinat As used by St And Coursework = 100	ions = 0%, Practical	Examinations = 0%	, Coursework = 100%
Re-assessment pattern:	Coursework Essay = 100%			
Module coordinator:	Dr R Streeter			
Module teaching staff:	Various			

## GG4201 Advanced Debates in Geography SCOTCAT Credits: 10 SCQF Level 10 Semester: 2 Academic year: 2017/8 & 2018/9 Availability restrictions: Core - available every year. Planned timetable: To be arranged.

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 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 coordinator:	Dr S Leahy		
Module teaching staff:	Team taught		

GG4297 Joint Honours Research Dissertation in Geography						
	SCOTCAT Credits:	30	SCQF Level 10	Semester:	2	
	Academic year:	2017/8 & 2018/9				
	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:	<b>Weekly contact</b> : 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 ho			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:	Oral Examination = 100%			
Module coordinator:	Dr S Leahy			
Module teaching staff:	Team taught			

### GG4298 Research Dissertation in Geography SCOTCAT Credits: 50 SCQF Level 10 Semester: 2 Academic year: 2017/8 & 2018/9 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	i-requisite(s):	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 coordinator:	Dr S Leahy				
Module teaching staff:	Team taught				

Advanced Study for Joi	nt or Major Hon	ours in Geograp	hy	
SCOTCAT Credits:	10	SCQF Level 10	Semester:	1
Academic year:	2017/8 & 2018/9			
Availability restrictions:	Entry to a Joint or Major Honours programme in Geography			
Planned timetable:	To be arranged.			
This module is designed to al subject matter of a selecte workload across the four ser chosen module but undertak	d 20-credit optiona nesters of their Hon	l module in Geogra ours programme. St	aphy (GG3221 - GC audents complete th	63289) yet balance the
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 learning	g: 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: Coursework = 100%			
Re-assessment pattern:	Coursework Essay = 100%			
Module coordinator:	Dr R Streeter			
Module teaching staff:	Various			