

## 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				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Available every year.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed			
<p>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.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 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)			
	<b>Scheduled learning:</b> 32 hours		<b>Guided independent study:</b> 168 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 30%, Coursework = 70%			
	<b>As used by St Andrews:</b> Coursework (including 30% Lab/fieldwork) = 100%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr K Roucoux			
<b>Module teaching staff:</b>	Various			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3201 Single Honours Research Design and Methodology Training (60)				
<b>SCOTCAT Credits:</b>	60	SCQF Level 9	<b>Semester:</b>	2
<b>Academic year:</b>	2017/8			
<b>Planned timetable:</b>	To be arranged.			
<p>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.</p>				
<b>Programme module type:</b>	Compulsory core for Single Honours Geography			
<b>Pre-requisite(s):</b>	Passes at with an average of 11 or better in GG2011 and GG2012			
<b>Anti-requisite(s):</b>	GG3202 - GG3204, SG3201 - SG3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours of classroom time (x 11 weeks), and a 1-week (40 hour) field class			
	<b>Scheduled learning:</b> 150 hours		<b>Guided independent study:</b> 450 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	No Re-assessment available			
<b>Module coordinator:</b>	Dr R Streeter			
<b>Module teaching staff:</b>	Team taught			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

<b>GG3202 Joint Honours Research Design and Methodology Training (30)</b>				
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b>	2
<b>Academic year:</b>	2017/8			
<b>Planned timetable:</b>	To be arranged.			
<p>This module occupies a central place in our field-based research-orientated degrees. It prepares students to undertake their independent 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.</p>				
<b>Programme module type:</b>	Compulsory core for Joint Honours Geography One of GG3202 or GG3203 is compulsory for Geography with Persian, Geography with Social Anthropology, Geography with Spanish			
<b>Pre-requisite(s):</b>	Passes at with an average of 11 or better in GG2011 and GG2012	<b>Anti-requisite(s):</b>	GG3201, GG3203, SG3201 - SG3204	
<b>Required for:</b>	GG4221, GG4222, GG4223, GG4224, GG4225, GG4297, GG4301			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 7.5 weeks).			
	<b>Scheduled learning:</b> 75 hours		<b>Guided independent study:</b> 225 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	No Re-assessment available			
<b>Module coordinator:</b>	Dr R Streeter			
<b>Module teaching staff:</b>	Team taught			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3203 Research Design and Methodology Training (50)			
<b>SCOTCAT Credits:</b>	50	SCQF Level 9	<b>Semester:</b> 2
<b>Academic year:</b>	2017/8 & 2018/9		
<b>Availability restrictions:</b>	Not available to General Degree Students.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module occupies a central place in our field-based research-orientated degrees. It prepares students to undertake their independent 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.</p>			
<b>Programme module type:</b>	One of GG3202 or GG3203 is compulsory for Geography with Persian, Geography with Social Anthropology, Geography with Spanish		
<b>Pre-requisite(s):</b>	Passes with an average of 11 or better in GG2011 and GG2012	<b>Anti-requisite(s):</b>	GG3201, GG3202, SG3201 - SG3204, SD3203
<b>Required for:</b>	GG4221, GG4222, GG4223, GG4224, GG4225, GG4298, GG4301		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 8.5 weeks), and a 1-week (40 hour) field class.		
	<b>Scheduled learning:</b> 125 hours	<b>Guided independent study:</b> 375 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Re-assessment pattern:</b>	No Re-assessment available		
<b>Module coordinator:</b>	Dr R Streeter		
<b>Module teaching staff:</b>	Team taught		

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3204 Research Design and Methodology Training (40)				
<b>SCOTCAT Credits:</b>	40	SCQF Level 9	<b>Semester:</b>	2
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Not available to General Degree Students.			
<b>Planned timetable:</b>	To be arranged.			
<p>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.</p>				
<b>Programme module type:</b>	One of GG3201 - GG3204 is compulsory (Core) for Geography			
<b>Pre-requisite(s):</b>	Passes with an average of 11 or better in GG2011 and GG2012			
<b>Anti-requisite(s):</b>	GG3201 - GG3203, SG3201 - SG3204, SD3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 8 weeks) plus a fieldclass.			
	<b>Scheduled learning:</b> 104 hours		<b>Guided independent study:</b> 296 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	No Re-assessment available			
<b>Module coordinator:</b>	Dr R Streeter			
<b>Module teaching staff:</b>	Team taught			

GG3221 Geographies of Identity and Power				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two-year cycle			
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Fri			
<p>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.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 10 weeks) and 1 x 2-hour revision session.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr M B Sothern			
<b>Module teaching staff:</b>	Dr M B Sothern			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

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			
<p>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.</p>				
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.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
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			
Availability restrictions:	Offered on a two-year cycle			
Planned timetable:	9.00 am - 11.00 am Mon			
<p>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.</p>				
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			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
Assessment pattern:	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
Re-assessment pattern:	2-hour Written Examination = 100%			
Module coordinator:	Dr D W Clayton			
Module teaching staff:	Dr D W Clayton			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3229 Environmental Management in Scotland				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two-year cycle.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Tue			
<p>This module explores current environmental management issues in Scotland. It discusses the primary sectors of land &amp; 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 &amp; value systems compete to shape the future of Scotland's natural heritage within a devolved political framework and in the context of climate change.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Anti-requisite(s):</b>	SG3229			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture (x 10 weeks) + 2 x 1-hour feedback/revision sessions and a 1-day (8 hour) field excursion.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Practical Examination = 20%, Coursework = 20%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr C R Warren			
<b>Module teaching staff:</b>	Dr C R Warren			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3232 Housing, Community and Social-Spatial Justice				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two-year cycle			
<b>Planned timetable:</b>	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.				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar (x 10 weeks) + 2 x 1-hour revision sessions			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr K McKee			
<b>Module teaching staff:</b>	Dr K McKee			

GG3234 Migration and Transnationalism				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two-year cycle			
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Fri			
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.				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 hour lecture and 1 hour seminar (x 10 weeks) + 2 x 1-hour essay feedback and exam revision sessions.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr D McCollum			
<b>Module teaching staff:</b>	Dr D McCollum			



## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

<b>GG3237 Political and Cultural Geographies of the Border</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two-year cycle			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue			
<p>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.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture (x 10 weeks) 1 x 1-hour seminar (x 10 weeks) 2 hours feedback and additional exam prep sessions			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 1-hour Written Examination = 40%, Coursework = 60%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr S Leahy			
<b>Module teaching staff:</b>	Dr S Leahy			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3238 Development: voice, power and identity in global times				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two year cycle			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon			
<p>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.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lecture (x 11 weeks), 1 hour seminar/workshop (x 11 weeks)			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Prof N Laurie			
<b>Module teaching staff:</b>	Prof N Laurie			

GG3239 European Population Trends				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two year cycle			
<b>Planned timetable:</b>	10.00 am - 1.00 pm Mon			
<p>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.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hour lecture (x 11 weeks). 4 tutorials (x 4 weeks)			
	<b>Scheduled learning:</b> 26 hours		<b>Guided independent study:</b> 176 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Prof H Kulu			
<b>Module teaching staff:</b>	Prof H Kulu			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3240 Ice and climate				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two year cycle			
<b>Planned timetable:</b>	9.00 am - 11.00 am Mon			
<p>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.</p>				
<b>Programme module type:</b>	Optional for Geography			
<b>Pre-requisite(s):</b>	Entry to honours programme in Geography or Sustainable Development			
<b>Learning and teaching methods and delivery:</b>	<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			
	<b>Scheduled learning:</b> 34 hours		<b>Guided independent study:</b> 166 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr T Cowton			
<b>Module teaching staff:</b>	Dr T Cowton			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3241 Quaternary Palaeoecology			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2017/8		
<b>Availability restrictions:</b>	Offered on a two year cycle		
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue		
<p>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.</p>			
<b>Programme module type:</b>	Optional for Single Honours Geography or Biology and Geography Joint Honours		
<b>Pre-requisite(s):</b>	GG2011 and GG2012 (or SD2001 and SD2002 with permission of module coordinator)		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture and 1 x 2-hour seminar.		
	<b>Scheduled learning:</b> 30 hours	<b>Guided independent study:</b> 160 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 20%, Coursework = 80%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Re-assessment pattern:</b>	4,000-word essay on a subject to be decided between the student and the module co-ordinator = 100%		
<b>Module coordinator:</b>	Prof K Bennett		
<b>Module teaching staff:</b>	Prof K Bennett		

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3262 Climate and Weather Systems				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two-year cycle.			
<b>Planned timetable:</b>	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.				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours lectures and 2 hours seminars (x 5 weeks) + 2 x 1-hour essay feedback and exam revision sessions			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> Written Examination = 60%, Coursework = 40%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Prof D I Benn			
<b>Module teaching staff:</b>	Prof D I Benn			

GG3263 Glaciers and Glaciation				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two-year cycle.			
<b>Planned timetable:</b>	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.				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar (x 11 weeks) + 1 x 1-hour revision session + 1 residential (two-day – 16 hours) field course during the semester.			
	<b>Scheduled learning:</b> 37 hours		<b>Guided independent study:</b> 163 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Prof D I Benn			
<b>Module teaching staff:</b>	Prof D I Benn			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3264 Oceans and Climate				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two-year cycle.			
<b>Planned timetable:</b>	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.				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar (x 11 weeks) + 1 x 1-hour revision session during the semester.			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 177 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> Written Examination = 60%, Coursework = 40%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Prof W E N Austin			
<b>Module teaching staff:</b>	Prof W E N Austin			

GG3271 Coastal Processes				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two year cycle			
<b>Planned timetable:</b>	11.00 am - 1.00 pm 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.				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Anti-requisite(s):</b>	GG3067			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Weekly lectures.			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Prof W E N Austin			
<b>Module teaching staff:</b>	Prof W E N Austin			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

<b>GG3272 Biogeography</b>				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two-year cycle			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon			
<p>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.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour lecture, (X 10 weeks), 1-hour seminar (x 6 weeks) 2-hour workshops (x 4 weeks) and 6 hours of fieldwork			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 170 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Re-assessment pattern:</b>	<p>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:</p> <ul style="list-style-type: none"> <li>- A 1500 word report, following the format of Assessment 1, using a different, secondary dataset (30%)</li> <li>- A 1500 word guide to the biogeography of a selected region (i.e. a different region to the first attempt; 30%)</li> <li>- A two-hour written exam (40%).</li> </ul>			
<b>Module coordinator:</b>	Dr I Lawson			
<b>Module teaching staff:</b>	Dr I Lawson, Dr K Roucoux			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3273 Scrutinising Segregation: Geographies of Diversity and Inequality			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2018/9		
<b>Availability restrictions:</b>	Offered on a two year cycle		
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed		
<p>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?</p> <p>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.</p>			
<b>Programme module type:</b>	Optional for all degrees involving Geography or Sustainable Development		
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour seminar (x 11 weeks), 1 x 1-hour lecture (x 11 weeks)		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 176 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%		
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%		
<b>Module coordinator:</b>	Dr N Finney		
<b>Module teaching staff:</b>	Dr N Finney		



## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3274 Socio-ecological Systems				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two-year cycle.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Tue			
<p>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.</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography			
<b>Pre-requisite(s):</b>	(GG2011 and GG2012) or (SD2001 and SD2002)			
<b>Anti-requisite(s):</b>	SG3272			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1-hour lecture (x 10 weeks), 1-hour seminar (x 10 weeks).			
	<b>Scheduled learning:</b> 20 hours		<b>Guided independent study:</b> 176 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr A Davies			
<b>Module teaching staff:</b>	Dr A Davies and Dr R Streeter			

GG3301 Special Topic for Joint or Major Honours in Geography (Junior Honours)				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Entry to a Joint or Major Honours programme in Geography.			
<b>Planned timetable:</b>	To be arranged.			
<p>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.</p>				
<b>Programme module type:</b>	Optional for Joint Honours Geography and all 'Geography with' degrees			
<b>Pre-requisite(s):</b>	GG2011 and GG2012			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 77 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	Coursework Essay = 100%			
<b>Module coordinator:</b>	Dr R Streeter			
<b>Module teaching staff:</b>	Various			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG3302 Special Topic for Honours in Geography (Senior Honours)			
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b> 1
<b>Academic year:</b>	2017/8 & 2018/9		
<b>Availability restrictions:</b>	Entry to a Joint or Major Honours programme in Geography		
<b>Planned timetable:</b>	To be arranged.		
This module is designed to allow Honours students in their Senior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment.			
<b>Programme module type:</b>	Optional for Joint Honours Geography, all 'Geography with' degrees and Single Honours students also taking ID4001 or ID4002.		
<b>Pre-requisite(s):</b>	GG2011 and GG2012		
<b>Required for:</b>	Single Honours Geography students also taking ID4001 or ID4002		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.		
	<b>Scheduled learning:</b> 23 hours	<b>Guided independent study:</b> 77 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Re-assessment pattern:</b>	Coursework Essay = 100%		
<b>Module coordinator:</b>	Dr R Streeter		
<b>Module teaching staff:</b>	Various		

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG4201 Advanced Debates in Geography				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Core - available every year.			
<b>Planned timetable:</b>	To be arranged.			
<p>This module extends and provides a summation of work undertaken in the geography Honours programme, providing students with an opportunity to reflect on the scope and diversity of geography as a discipline and to think holistically about their own learning. The module is structured around a set of readings and seminars that encourage student to study and debate important contemporary issues and debates within geography (e.g. climate change, globalisation, the nature of social inequality, the interface between nature and culture). It is examined with a single three-hour examination comprised of a mixture of seen and unseen exam questions. These address the nature of geography as a discipline and the way in which geographical reasoning has or might be applied to significant contemporary issues.</p>				
<b>Programme module type:</b>	Compulsory core for Single Honours Geography Optional for all 'Geography with' degrees			
<b>Pre-requisite(s):</b>	1 of SG3201 - SG3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 6 x 2-hour seminars during the semester.			
	<b>Scheduled learning:</b> 12 hours		<b>Guided independent study:</b> 88 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 100%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr S Leahy			
<b>Module teaching staff:</b>	Team taught			

GG4297 Joint Honours Research Dissertation in Geography				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Core - available every year.			
<b>Planned timetable:</b>	To be arranged.			
<p>The research dissertation is the fundamental piece of independent work upon which the Geography degree is based. It provides students with the opportunity to design and undertake an independent, original piece of empirical research under the supervision of a member of staff. The dissertation is a substantial, independent piece of research that represents the culmination of both substantive and core training in Geography. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>).</p>				
<b>Programme module type:</b>	Compulsory for Joint Honours Geography			
<b>Pre-requisite(s):</b>	GG3202, SG3202		<b>Anti-requisite(s):</b>	GG4298
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor)			
	<b>Scheduled learning:</b> 8 hours		<b>Guided independent study:</b> 292 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Re-assessment pattern:</b>	Oral Examination = 100%			
<b>Module coordinator:</b>	Dr S Leahy			
<b>Module teaching staff:</b>	Team taught			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

GG4298 Research Dissertation in Geography				
<b>SCOTCAT Credits:</b>	50	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Core - available every year.			
<b>Planned timetable:</b>	To be arranged.			
<p>The research dissertation is the fundamental piece of independent research work upon which the Geography degree is based. It provides students with the opportunity to design and undertake an independent, original piece of empirical research under the supervision of a member of staff. The dissertation is a substantial, independent piece of research that represents the culmination of substantive and core training in Geography. An important component of the dissertation is the annual Senior Honours Research Conference at which all students present their work to members of the school and to Junior Honours students as an oral presentation. (Guidelines for printing and binding dissertations can be found at: <a href="http://www.st-andrews.ac.uk/printanddesign/dissertation/">http://www.st-andrews.ac.uk/printanddesign/dissertation/</a>)</p>				
<b>Programme module type:</b>	Compulsory core for Single Honours Geography, all 'Geography with' degrees			
<b>Pre-requisite(s):</b>	SG3201 or SG3203	<b>Anti-requisite(s):</b>	GG4297	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor), plus a 1 day (8-hour) conference			
	<b>Scheduled learning:</b> 16 hours		<b>Guided independent study:</b> 490 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation and Conference presentation = 100%			
<b>Re-assessment pattern:</b>	Oral Examination = 100%			
<b>Module coordinator:</b>	Dr S Leahy			
<b>Module teaching staff:</b>	Team taught			

GG4301 Advanced Study for Joint or Major Honours in Geography				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Entry to a Joint or Major Honours programme in Geography			
<b>Planned timetable:</b>	To be arranged.			
<p>This module is designed to allow Joint or Major Honours students in their Senior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment, at 4000-level (an advanced essay).</p>				
<b>Programme module type:</b>	Optional for all degrees involving Geography except Single Honours			
<b>Pre-requisite(s):</b>	Entry to a Joint or Major Honours programme in Geography, and normally a pass in one of SG3202 or SG3203			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.			
	<b>Scheduled learning:</b> 23 hours		<b>Guided independent study:</b> 77 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	Coursework Essay = 100%			
<b>Module coordinator:</b>	Dr R Streeter			
<b>Module teaching staff:</b>	Various			

## Sustainable Development (SD) modules

SD3100 Methodologies for Sustainable Development			
<b>SCOTCAT Credits:</b>	30	SCQF Level 9	<b>Semester:</b> 2
<b>Academic year:</b>	2017/8		
<b>Planned timetable:</b>	To be arranged.		
<p>This module prepares students to undertake final year dissertation research. This module builds on the research methods explored in other SD honours modules. Students will learn about how to design and execute a research project, how to situate research questions in the broader agenda of Sustainable Development and within appropriate interdisciplinary literatures. A group research project provides the opportunity to apply this learning in a fieldwork setting. Students taking this module will understand the wider epistemological debates surrounding interdisciplinary, know how to define problems and form tractable research questions as well as how to design rigorous methodologies to answer these questions. By the end of the module each student will have developed a research proposal suitable for a final year dissertation project.</p>			
<b>Programme module type:</b>	Compulsory for Sustainable Development (BSc and MA)		
<b>Pre-requisite(s):</b>	SD2001 and SD2002 and at least 30 credits of SD at 3000 or 4000 level.		
<b>Anti-requisite(s):</b>	SG3201, SG3202, SG3203, SG3204, GG3201.		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 3-hour seminar (x 7 weeks); 1 x 3-hour practical (x 3 weeks); residential field work (x 3 days)		
	<b>Scheduled learning:</b> 57 hours	<b>Guided independent study:</b> 252 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework = 100%		
<b>Re-assessment pattern:</b>	Coursework = 100%		
<b>Module coordinator:</b>	Dr R White		
<b>Module teaching staff:</b>	Team taught		

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SD3110 Environmental Economics				
SCOTCAT Credits:	30	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 Thu			
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 co-written by one of the course lecturers.				
Programme module type:	Optional for Sustainable Development			
Pre-requisite(s):	usually SD2002	Anti-requisite(s):	SD3224	
Learning and teaching methods and delivery:	Weekly contact: 2-hour lectures (x 10 weeks), 2-hour practicals (x 4 weeks)			
	Scheduled learning: 28 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: 2-hour Written Examination = 50%, Coursework = 50%			
Re-assessment pattern:	2-hour Written Examination = 100%			
Module coordinator:	Dr E McLaughlin			
Module teaching staff:	Dr E McLaughlin, Prof N Hanley, Dr T Borger			

SD3111 Home & Energy Geographies				
SCOTCAT Credits:	30	SCQF Level 9	Semester:	1
Academic year:	2018/9			
Availability restrictions:	Offered on a two year cycle			
Planned timetable:	10.00 am - 1.00 pm Thu			
An abundant and uninterrupted supply of energy underpins all of our everyday activities; it is fundamental to the quality of our lives. This module will explore the history of our energy use and how it is implicated in modern life. It will do this by exploring why we need energy, the nature of energy demand (e.g. we use more energy than ever before, and our energy demand is predicted to double by the year 2050), and the interconnectedness of energy and sustainability. This module will predominantly focus on domestic energy use (and therefore discuss notions of home, dwelling and domesticity), but will also link to international debates about energy and sustainability. Throughout the module, theories of social and technological change will be explored as a means to understanding transitions in energy demand.				
Programme module type:	Optional for Sustainable Development			
Pre-requisite(s):	(SD2001 and SD2002) OR (GG2011 and GG2012)	Anti-requisite(s):	SD3221	
Learning and teaching methods and delivery:	Weekly contact: 1 lecture (x 10 weeks), 1 seminar (x 10 weeks)			
	Scheduled learning: 30 hours		Guided independent study: 278 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 L Reid			
Module teaching staff:	Dr L Reid			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SD4110 Transitioning to sustainability: community, nature and governance				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	2
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two year cycle			
<b>Planned timetable:</b>	To be arranged.			
<p>A transition towards sustainability will be multifaceted, requiring novel forms of governance and acknowledging the roles and perspectives of different actors. State intervention alone will not suffice; local and grassroots initiatives and movements are critical. In this module we will explore how communities of place, interest, practice and value can contribute to multi-level governance for sustainability, but can also question dominant assumptions manifested at national or international levels. 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.</p>				
<b>Programme module type:</b>	Optional for Sustainable Development			
<b>Pre-requisite(s):</b>	SD2001 and SD2002	<b>Anti-requisite(s):</b>	SD3225	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 hour lecture (x11 weeks), 1 hour seminar (x11 weeks), 3 hour practical class (x2 weeks), 4hr field-trip (x6 weeks)			
	<b>Scheduled learning:</b> 57 hours		<b>Guided independent study:</b> 244 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 40%, Coursework = 60%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr R White			
<b>Module teaching staff:</b>	Dr R White			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SD4111 Governance for Sustainability			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 1
<b>Academic year:</b>	2018/9		
<b>Availability restrictions:</b>	Offered on a two year cycle		
<b>Planned timetable:</b>	10.00 am - 1.00 pm Fri		
<p>Many of the important sustainability issues we face as a society are complex and multi-faceted. Building more sustainable solutions is likely to require collaboration between different actors at multiple scales. The effectiveness of institutional arrangements has become a key question within the sustainability paradigm. What principles of governance can we bring to bear in the design and reform of governance systems which will lead to more sustainable outcomes? This module will explore insights from planning, environmental geography, political science and other social science disciplines. Students will acquire practical knowledge of governance arrangements for sustainability, as well as critical skills to assess notions of 'Good' Governance. Students will also develop transferrable research skills for policy and institutional analysis.</p>			
<b>Programme module type:</b>	Optional for Sustainable Development		
<b>Pre-requisite(s):</b>	SD2001 and SD2002	<b>Anti-requisite(s):</b>	SD3222
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lectures (x 10 weeks), 2 x 2-hour seminars, 4 x 2-hour practicals		
	<b>Scheduled learning:</b> 35 hours	<b>Guided independent study:</b> 265 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 20%, Coursework = 30%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework (presentation - 20%, report - 30%) = 50%		
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%		
<b>Module coordinator:</b>	Dr T Stojanovic		
<b>Module teaching staff:</b>	Dr T Stojanovic		



## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SD4112 Global Energy Politics				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Availability restrictions:</b>	Offered on a two year cycle			
<b>Planned timetable:</b>	10.00 am - 1.00 pm Fri			
<p>This module looks into the global context of energy challenges facing society today and tomorrow. It takes a look at each major type of energy system. The focus is on (1) fossil fuels, (2) low carbon energy sources and (3) modern Renewables and (4) energy consumption. You will reflect on how we can respond to the global energy quadrilemma - reducing carbon, affordable energy, energy security and energy justice. Students will understand how to assess the major political questions involved in each of these energy systems. You will also gain an understanding of the statistical realities that need to be overcome. The module will provide you with a detailed and thorough investigation of how sustainable energy systems can and should be constructed, as well as appreciating the political obstacles facing a sustainable pathway. The module will also develop methodological skills to construct and research energy scenarios for a NGO, business or government department.</p>				
<b>Programme module type:</b>	Optional for Sustainable Development			
<b>Pre-requisite(s):</b>	SD2001 and SD2002	<b>Anti-requisite(s):</b>	SD3222	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture (x 11 weeks), 1 seminar (x 11 weeks), 1 workshop (x 4 weeks)			
	<b>Scheduled learning:</b> 41 hours		<b>Guided independent study:</b> 264 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 20%, Coursework = 30%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 50%, Coursework = 50%			
<b>Re-assessment pattern:</b>	3-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr D McCauley			
<b>Module teaching staff:</b>	Dr D McCauley			

SD4113 Environment and Development Economics				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2018/9			
<b>Availability restrictions:</b>	Offered on a two year cycle			
<b>Planned timetable:</b>	To be arranged.			
<p>The world has changed dramatically since the early 1700s, before the onset of modern economic growth and the industrial revolution. However, despite rapid advancements, the world today is divided between high-income, middle-income, and low-income countries. This module takes a broad perspective on economic development and how economic development interacts with the environment. The module introduces key concepts in economic development and natural resource management.</p>				
<b>Programme module type:</b>	Optional for Sustainable Development			
<b>Pre-requisite(s):</b>	passes in SD2001 and SD2002	<b>Anti-requisite(s):</b>	SD3224, SD5101	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 lectures (x 10 weeks), 2 practicals (x 4 weeks)			
	<b>Scheduled learning:</b> 28 hours		<b>Guided independent study:</b> 270 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 50%, Coursework = 50%			
<b>Re-assessment pattern:</b>	2-hour Written Examination = 100%			
<b>Module coordinator:</b>	Dr E McLaughlin			
<b>Module teaching staff:</b>	Dr E McLaughlin, Prof N Hanley, Dr T Borger			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SD4297 Dissertation in Sustainable Development			
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b> 2
<b>Academic year:</b>	2017/8		
<b>Availability restrictions:</b>	Available only to Sustainable Development Honours students.		
<b>Planned timetable:</b>	To be arranged.		
<p>This dissertation builds 3000-level research methods training and will demonstrate the importance of an interdisciplinary approach to key questions of sustainable development. This independent research will involve the review of relevant literatures, the application of rigorous methodologies, the collection of data as well as the appropriate analysis and interpretation of data. A final dissertation of not more than 10,000 words will comprise the primary mode of assessment but students will also participate in the Senior Honours Research Conference at which all students will present their work to members of the school. To support this learning students will be supervised by a member of staff and collective workshops on relevant skills such as oral presentation skills, approaches to scientific writing, and presenting data will also be offered. Students will also be invited to attend a dissertation away day at the beginning of the semester.</p>			
<b>Programme module type:</b>	Compulsory for Single Sustainable Development (BSc and MA Hons) Compulsory for Joint Honours Sustainable Development if dissertation or research project is not taken in the partner subject Optional for Joint Honours Sustainable Development if partner subject involves a dissertation or research project		
<b>Pre-requisite(s):</b>	SD3100 or SG3201 or SG3202 or SG3203 or SG3204	<b>Anti-requisite(s):</b>	SD4299
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 away day (8 hours), 2-hour skills workshops (x4), up to 10 hours individual supervision, by arrangement with supervisor, student research conference (4 hours)		
	<b>Scheduled learning:</b> 30 hours	<b>Guided independent study:</b> 270 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 5%, Coursework = 95%		
	<b>As used by St Andrews:</b> Coursework (10,000-word dissertation = 95%, oral or poster presentation a student research conference = 5%) = 100%		
<b>Re-assessment pattern:</b>	10,000-word Dissertation = 100%		
<b>Module coordinator:</b>	Dr R White		
<b>Module teaching staff:</b>	Team taught		

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SD4299 Dissertation in Sustainable Development			
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b> Whole Year
<b>Academic year:</b>	2017/8		
<b>Availability restrictions:</b>	Core - Available only to students who intend an Honours Degree in Sustainable Development.		
<b>Planned timetable:</b>	To be arranged.		
<p>This module is largely based upon independent study. Students select a research question in Sustainable Development, mount a research programme to investigate the topic, and write a dissertation on the work. The topic is selected during the second semester of the junior honours year; data can be collected during the following vacation with data analysis and the writing of the dissertation taking place over both semesters of Senior Honours. Each student is supervised by a member of the teaching staff from an appropriate disciplinary area who will ensure that the topic chosen is viable and advise students on data collection and analysis. Students attend an introductory session at the start of semester 2, followed by a series of 'workshop' sessions covering aspects of research design and process during the semester. Individual tutorials are decided between the individual student and their supervisors. The dissertation will normally be based in the disciplinary area of the student's partner subject, but in recognition of the interdisciplinary nature of the field of study of sustainable development and of the SD Programme, the dissertation will itself be interdisciplinary to some extent. 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.</p>			
<b>Programme module type:</b>	Compulsory for Sustainable Development		
<b>Pre-requisite(s):</b>	One of SG3201 - SG3204	<b>Anti-requisite(s):</b>	SD4002, SD4297
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor), plus a 1 day (8-hour) conference		
	<b>Scheduled learning:</b> 16 hours	<b>Guided independent study:</b> 584 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Dissertation and Conference Paper = 100%		
<b>Re-assessment pattern:</b>	Oral Examination = 100%		
<b>Module coordinator:</b>	Dr R White		
<b>Module teaching staff:</b>	Team taught		

## Sustainable Geography (SG) modules

SG4221 Review Essay				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8 & 2018/9			
<b>Availability restrictions:</b>	Core - available every year			
<b>Planned timetable:</b>	4.00 pm - 6.00 pm Thu			
<p>This elective requires students, working independently, to identify and critically review a body of literature, giving an account of its substantive content, and critically assessing the evidence on which it is based. Students can either identify an intellectual field that lies outside those addressed in available 3000-level options modules, or build on a field covered in the programme, pursuing it at greater depth. In addition to supervisory sessions and module tutorials, students may also attend sessions in a relevant 3000-level option module running in the same semester.</p>				
<b>Programme module type:</b>	Optional elective for all degrees involving Geography			
<b>Pre-requisite(s):</b>	Passes in one of SG3201 - SG3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Introductory lecture and seminar (2 hours) followed by guided independent study (one-to-one supervision)			
	<b>Scheduled learning:</b> 2 hours		<b>Guided independent study:</b> 198 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	Review Essay = 100%			
<b>Module coordinator:</b>	Dr S Leahy			
<b>Module teaching staff:</b>	Team taught			

SG4222 Advanced Qualitative Analysis				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Planned timetable:</b>	2.00 pm - 4.00 pm Thu			
<p>This module offers advanced training in methods of qualitative analysis that facilitate dissertation work and develop transferable skills for future careers. Learning is project/problem-based, and students gain practical experience of working with a range of qualitative data (e.g. archives, visual and textual documents and interview transcripts) using a range of analytical approaches (e.g. discourse analysis, deconstruction, grounded theory and computer-assisted qualitative analysis). Research data are drawn from a range of areas within geography and sustainable development. . Techniques, themes and materials will vary according to staff availability.</p>				
<b>Programme module type:</b>	Optional elective for all degrees involving Geography			
<b>Pre-requisite(s):</b>	Passes in one of SG3201 - SG3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lecture (x 4 weeks), 2-hour seminar (x2 weeks), 2-hour practical (x3 weeks)			
	<b>Scheduled learning:</b> 18 hours		<b>Guided independent study:</b> 182 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	Coursework project = 100%			
<b>Module coordinator:</b>	Dr M Sothern			
<b>Module teaching staff:</b>	Team taught			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SG4223 Advanced Quantitative Analysis				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Planned timetable:</b>	1.00 pm - 5.00 pm Tue			
<p>Students taking this module will learn some of the core research skills necessary to be a professional quantitative social science researcher and then to carry out a typical consulting project. It will allow them to explore a substantive policy issue, carry out their own quantitative research and then make recommendations based on these findings. They will be presented with a 'real world' scenario and be expected to take on the role of a researcher who is advising policy makers; in simulations of various policy forums, they will then learn how to defend their recommendations and advice. They will first be taught the relevant quantitative research skills and introduced to potentially useful research resources. They will then be expected to construct their own research strategy, carry out the necessary research and present this in various formats, working independently of the teaching staff.</p>				
<b>Programme module type:</b>	Optional elective for all degrees involving Geography			
<b>Pre-requisite(s):</b>	Passes in one of SG3201 - SG3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour lectures, 2-hour seminars, 1-hour practical classes each week for 7 weeks, and occasional tutorials.			
	<b>Scheduled learning:</b> 38 hours		<b>Guided independent study:</b> 162 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 13%, Coursework = 87%			
	<b>As used by St Andrews:</b> Practical Examination = 13%, Coursework = 87%			
<b>Re-assessment pattern:</b>	Coursework project = 100%			
<b>Module coordinator:</b>	Dr K Keenan			
<b>Module teaching staff:</b>	Team taught			

SG4224 Advanced Topics in Physical Sciences				
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b>	1
<b>Academic year:</b>	2017/8			
<b>Planned timetable:</b>	2.00 pm - 5.00 pm Tue			
<p>This module introduces students to a range of advanced and cutting edge topics in Physical Geography and other physical sciences relevant to geography and sustainable development. 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.</p>				
<b>Programme module type:</b>	Optional elective for all degrees involving Geography			
<b>Pre-requisite(s):</b>	Passes in one of SG3201 - SG3204			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hour lectures (x 9 weeks) and 1 x 1-day (4 hour) field class.			
	<b>Scheduled learning:</b> 22 hours		<b>Guided independent study:</b> 178 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Re-assessment pattern:</b>	Coursework project = 100%			
<b>Module coordinator:</b>	Dr R Streeter			
<b>Module teaching staff:</b>	Team taught			

## Geography & Sustainable Development - Honours Level - 2017/8 - August 2017

SG4228 Advanced Topics in Geographic Information Science (GISci)			
<b>SCOTCAT Credits:</b>	20	SCQF Level 10	<b>Semester:</b> 1
<b>Academic year:</b>	2017/8		
<b>Availability restrictions:</b>	Available every year.		
<b>Planned timetable:</b>	1.00 pm - 5.00 pm Mon		
<p>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.</p> <p>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.</p>			
<b>Programme module type:</b>	Optional elective for all degrees involving Geography		
<b>Pre-requisite(s):</b>	SG3201-4 Unit 2a OR Unit 3 AND SG3201-4 Unit 6		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 hours lectures (x 9 weeks), 2-hour practical classes (x 6 weeks), 2-hour IT Lab Help sessions (x 3 weeks)		
	<b>Scheduled learning:</b> 36 hours	<b>Guided independent study:</b> 164 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	<b>As used by St Andrews:</b> Coursework project = 100%		
<b>Re-assessment pattern:</b>			
<b>Module coordinator:</b>	Dr J Long		
<b>Module teaching staff:</b>	Dr J Long, Dr U Demsar		