## **Geography (GG) Modules**

# GG3201 Single Honours Research Design and Methodology Training (60) SCOTCAT Credits: 60 SCQF Level 9 Semester 2 Academic year: 2019/0 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.

Pre-requisite(s):	Before taking this module you must pass GG2012			
Anti-requisite(s)	You cannot take this module if you take G	You cannot take this module if you take GG3202 or take GG3203		
Learning and teaching methods of 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 week (40 hour) field class  Scheduled learning: 150 hours  Guided independent study: 450 hours			
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
Assessment pattern:	As used by St Andrews: Coursework = 100%			
Re-assessment pattern:	No Re-assessment available			
Module coordinator:	Dr R T 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:	2019/0			
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.

Pre-requisite(s):	Before taking this module you must pass GG2012		
Anti-requisite(s)	You cannot take this module if you take GG3201 or take GG3203		
Learning and teaching methods of delivery:	Weekly contact: Varies according to the combination of elements (module un chosen by the student. Average of 10 hours (x 7.5 weeks).  Scheduled learning: 75 hours  Guided independent study: 225 hours		
methods of delivery:			
Accessment nottorn	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
Assessment pattern:	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	No Re-assessment available		
Module coordinator:	Dr R T Streeter		
Module teaching staff:	Team taught		

#### GG3203 Research Design and Methodology Training (50)

SCOTCAT Credits:	50	SCQF Level 9	Semester	2
Academic year:	2019/0			
Availability restrictions:	Not available to General Degree Students.			
Planned timetable:	To be arranged.			

This module occupies a central place in our field-based research-orientated degrees. It prepares students to undertake their independent research dissertation and develops transferable professional skills useful beyond graduation. It is designed to prepare students for undertaking original, empirical research by introducing them to the general principles, methodologies, and methods used in the collection and generation of data. Students need to make an informed choice, with the help of their Advisor, to select from the units shared with the larger 60-credit SG3201. The module concludes with students producing an independent research proposal for their Senior Honours dissertation research.

Pre-requisite(s):	Before taking this module you must pass GG2012		
Anti-requisite(s)	You cannot take this module if you take GG3201 or take GG3202 or take SD3203		
Learning and teaching methods of 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		
Accessment mattern.	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
Assessment pattern:	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	No Re-assessment available		
Module coordinator:	Dr R T Streeter		
Module teaching staff:	Team taught		

#### GG3204 Research Design and Methodology Training (40)

SCOTCAT Credits:	40	SCQF Level 9	Semester	2
Academic year:	2019/0			
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.

Learning and teaching methods of delivery:	<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.			
methous of delivery.	Scheduled learning: 104 hours	Guided independent study: 296 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85% As used by St Andrews:			
Re-assessment pattern:	Coursework = 100%  No Re-assessment available			
Module coordinator:	Dr R T Streeter			
Module teaching staff:	Team taught	Team taught		

#### GG3221 Geographies of Identity and Power

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
Availability restrictions:	Offered on a two-year cycle			
Planned timetable:	3.00 pm - 5.00 pm <sup>1</sup>	Tues		

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.

Pre-requisite(s):	Before taking this module you must pass GG2012 or pass SD2002		
Learning and teaching	Weekly contact: 1 x 2-hour lecture (x 10 weeks) and 1 x 2-hour revision session.		
methods of delivery:	Scheduled learning: 0 hours	Guided independent study: 0 hours	
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%		
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%		
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Dr M B Sothern		

#### GG3224 HIV/AIDS in sub-Saharan Africa

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
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.

Pre-requisite(s):	Before taking this module you must pass GG2012 or pass SD2002			
Learning and teaching	<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.			
methods of delivery:	Scheduled learning: 0 hours Guided independent study: 0 hour			
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%			
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-assessment pattern:	2-hour Written Examination = 100%			
Module coordinator:	Dr M G Kesby			

# GG3237 Political and Cultural Geographies of the Border

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
Availability restrictions:	Offered on a two-year cycle			
Planned timetable:	9:00 am - 11:00 am Thurs			

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.

Pre-requisite(s):	Before taking this module you must pass GG2012 or pass SD2002		
Learning and teaching methods of delivery:	<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		
methods of delivery:	Scheduled learning: 0 hours Guided independent study: 0 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%		
	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		

#### GG3239 European Population Trends

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
Availability restrictions:	Offered on a two year cycle			
Planned timetable:	10.00 am - 1.00 pm	Mon		

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.

Pre-requisite(s):	Before taking this module you must take GG2012 or take SD2002		
Learning and teaching	Weekly contact: 2 hour lecture (x 11 weeks). 4 tutorials (x 4 weeks)		
methods of 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%, Coursework = 50%		
Re-assessment pattern:	2-hour Written Examination = 100%		
Module teaching staff:	Prof H Kulu		

#### GG3240 Ice and climate

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
Availability restrictions:	Offered on a two year cycle			
Planned timetable:	9.00 am - 11.00 am Mon			

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.

Pre-requisite(s):	Entry to honours programme in geography or sustainable development		
Learning and teaching methods of 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		
methous of delivery.	Scheduled learning: 0 hours Guided independent study: 0 h		
Accessment nettern	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%		
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%		
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Dr T R Cowton		
Module teaching staff:	Dr T Cowton		

#### GG3241 Quaternary Palaeoecology

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
Availability restrictions:	Offered on a two year cycle			
Planned timetable:	11.00 am - 1.00 pm	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.

Pre-requisite(s):	Before taking this module you must take GG2012 or take SD2002. Entry with SD2002 requires the permission of the module coordinator		
Learning and teaching	Weekly contact: 1 x 1-hour lecture and 1 x 2-hour seminar.		
methods of delivery:	Scheduled learning: 0 hours	Guided independent study: 0 hours	
Accessment mattern.	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%		
Assessment pattern:	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 coordinator = 100%		
Module coordinator:	Prof K D Bennett		
Module teaching staff:	Prof K Bennett		

#### GG3262 Climate and Weather Systems

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
Availability restrictions:	Availability TBC - Offered on a two-year cycle			
Planned timetable:	9:00 am - 11:00 am Tues			

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.

Pre-requisite(s):	Before taking this module you must pass GG2011 and pass GG2012			
Learning and teaching methods of 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			
methods of delivery.	Scheduled learning: 0 hours Guided independent study: 0 hours			
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%			
Assessment pattern:	As used by St Andrews: Written Examination = 60%, Coursework = 40%			
Re-assessment pattern:	Written Examination = 60%, Coursework = 40%			
Module coordinator:	Prof D I Benn			

#### **GG3271 Coastal Processes**

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
Availability restrictions:	Offered on a two year cycle			
Planned timetable:	11.00 am - 1.00 pm	11.00 am - 1.00 pm Mon		

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.

Pre-requisite(s):	Before taking this module you must pass GG2012 or pass SD2002		
Anti-requisite(s)	You cannot take this module if you take GG3067		
Learning and teaching	Weekly contact: Weekly lectures.		
methods of delivery:	Scheduled learning: 0 hours Guided independent study: 0 hours		
Assessment mattern.	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%		
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%		
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Prof W E N Austin		

#### GG3274 Socio-ecological Systems

SCOTCAT Credits:	20	SCQF Level 9	Semester	1
Academic year:	2019/0			
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.

Learning and teaching	Weekly contact: 1-hour lecture (x 10 weeks), 1-hour seminar (x 10 weeks).  Scheduled learning: 20 hours  Guided independent study: 176 hours			
methods of delivery:				
Accessment nottorns	minations = 0%, Coursework = 100%			
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 60%, Coursework = 40%			
Re-assessment pattern:	2-hour Written Examination = 100%			
Module coordinator:	Dr A L Davies			
Module teaching staff:	Dr A Davies and Dr R Streeter			

#### **GG3301 Special Topic for Joint or Major Honours in Geography (Junior Honours)**

SCOTCAT Credits:	10	SCQF Level 9	Semester	1	
Academic year:	2019/0				
Availability restrictions:	Entry to a Joint or M	lajor Honours program	me in Geography.		
Planned timetable:	timetable to be con-	firmed.			

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.

Pre-requisite(s):	Before taking this module you must pass G	G2011 and pass GG2012			
Learning and teaching methods of 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 assessme (4000-word essay). Weekly contact hours vary (with the option module taken), but average scheduled learning across the range of modules available is 23 hours.				
	Scheduled learning: 23 hours Guided independent study: 77 hours				
A	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
Assessment pattern:	As used by St Andrews: Coursework = 100%				
Re-assessment pattern:	Coursework Essay = 100%				
Module coordinator:	Dr R T Streeter				
Module teaching staff:	Various				

SCOTCAT Credits:	10	SCQF Level 9	Semester	Both	
Academic year:	2019/0				
Availability restrictions:	Entry to a Joint or Major Honours programme in Geography				
Planned timetable:	timetable to be con	firmed.			
	ours programme. St		3289) yet balance the wor contact hours of their		
Pre-requisite(s):	Before taking this m	Before taking this module you must pass GG2011 and pass GG2012			
Learning and teaching methods of delivery:	any 3000-level GG oword essay). Weekl	or SD coded option mo y contact hours vary (v	ecture/seminar contact hodule, but do a separate a with the option module tage of modules available i	ssessment (4000- aken), but the	
	Scheduled learning: 23 hours Guided independent study: 77 hours				
Accordment nattors	As defined by QAA: Written Examination		minations = 0%, Coursew	ork = 100%	
Assessment pattern:	As used by St Andrews: Coursework = 100%				
	Coursework Essay = 100%				
Re-assessment pattern:	Coursework Essay = 100%				
Re-assessment pattern: Module coordinator:	Dr R T Streeter	: 100%			

SCOTCAT Credits:	ography 10	SCQF Level 10	Semester	2		
	<b>+</b>	SCQF Level 10	Semester	2		
Academic year:	<u> </u>	2019/0				
Availability restrictions:		Core – available every year. Not automatically available to General Degree students				
Planned timetable:	To be arranged.		aken in the geography Ho			
encourage student to stud change, globalisation, the with a single three-hour e	ly and debate imports nature of social ine examination comprises a discipline and this issues.  Before taking this	ant contemporary issignative and its a	d around a set of readings us and debates within geog between nature and culturn and unseen exam questinaphical reasoning has or ness SG3201 or pass SG3202 o	graphy (e.g. clima ire). It is examin ons. These addro night be applied		
	pass SG3204					
Learning and teaching		5 x 2-hour seminars d				
methods of delivery:	Scheduled learnin	g: 12 hours	Guided independent stu	. al OO la a		
				idy: 88 nours		
Accordment nottorn	As defined by QAA Written Examinat		Examinations = 0%, Course			
Assessment pattern:		ions = 100%, Practical	Examinations = 0%, Course			
Assessment pattern:  Re-assessment pattern:	Written Examinat  As used by St And	ions = 100%, Practical rews: amination = 100%	Examinations = 0%, Course			
	Written Examinat  As used by St And 2-hour Written Ex	ions = 100%, Practical rews: amination = 100%	Examinations = 0%, Course			

SCOTCAT Credits:	20	SCQF Level 10	Semester	1		
Academic year:	2019/0					
Availability restrictions:	Core - available every year					
Planned timetable:	5.00 pm - 6.00 pm	ı Thu				
identify an intellectual fiel a field covered in the pro	d that lies outside t gramme, pursuing i	hose addressed in avail t at greater depth. In a	ence on which it is based. S able 3000-level options mo addition to supervisory ses option module running in tl	odules, or build of ssions and modu		
Pre-requisite(s):	Before taking this	Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203				
Anti-requisite(s)	You cannot take t	his module if you take (	GE4019			
Learning and teaching		Introductory lecture an y (one-to-one supervisi	d seminar (2 hours) follow on)	ed by guided		
methods of delivery:	Scheduled learning	ng: 2 hours	Guided independent stu	<b>dy:</b> 198 hours		
Assessment nothers:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
Assessment pattern:	•	As used by St Andrews: Coursework = 100%				
	Review Essay = 100%					
Re-assessment pattern:	,					
Re-assessment pattern: Module coordinator:	Dr S Leahy	00%				

SCOTCAT Credits:	20	SCQF Level 10	Semester	1		
Academic year:	2019/0					
Availability restrictions:	Not automatically	Not automatically available to General Degree students				
Planned timetable:	2.00 pm - 4.00 pm	Thu				
transcripts) using a range computer-assisted qualita				•		
sustainable development.						
	. Techniques, theme	es and materials will va		bility.		
sustainable development.  Pre-requisite(s):  Learning and teaching	. Techniques, theme Before taking this	es and materials will va module you must pass 2-hour lecture (x 4 wee	ry according to staff availa	bility. or pass GG3203		
sustainable development.  Pre-requisite(s):	Before taking this  Weekly contact: 2	es and materials will va module you must pass 2-hour lecture (x 4 wee s)	ry according to staff availa GG3201 or pass GG3202 c	bility. or pass GG3203 eeks), 2- hour		
sustainable development.  Pre-requisite(s):  Learning and teaching methods of delivery:	. Techniques, theme Before taking this Weekly contact: 2 practical (x3 week Scheduled learnin As defined by QAA	es and materials will va module you must pass 2-hour lecture (x 4 wee s) g: 18 hours A:	ry according to staff availa GG3201 or pass GG3202 c ks), 2-hour seminar (x2 we	bility. or pass GG3203 eeks), 2- hour ady: 182 hours		
sustainable development.  Pre-requisite(s):  Learning and teaching	. Techniques, theme Before taking this Weekly contact: 2 practical (x3 week Scheduled learnin As defined by QAA	es and materials will va module you must pass 2-hour lecture (x 4 wee s) g: 18 hours A: ions = 0%, Practical Exa rews:	ry according to staff availa GG3201 or pass GG3202 cks), 2-hour seminar (x2 we	bility. or pass GG3203 eeks), 2- hour ady: 182 hours		
sustainable development.  Pre-requisite(s):  Learning and teaching methods of delivery:	Techniques, theme Before taking this Weekly contact: 2 practical (x3 week Scheduled learnin As defined by QA/ Written Examinat As used by St And	es and materials will va module you must pass 2-hour lecture (x 4 wee s) g: 18 hours A: ions = 0%, Practical Exa rews:	ry according to staff availa GG3201 or pass GG3202 cks), 2-hour seminar (x2 we	bility. or pass GG3203 eeks), 2- hour ady: 182 hours		
sustainable development.  Pre-requisite(s):  Learning and teaching methods of delivery:  Assessment pattern:	. Techniques, theme Before taking this Weekly contact: 2 practical (x3 week Scheduled learnin As defined by QA/ Written Examinat As used by St And Coursework = 100	es and materials will va module you must pass 2-hour lecture (x 4 wee s) g: 18 hours A: ions = 0%, Practical Exa rews:	ry according to staff availa GG3201 or pass GG3202 cks), 2-hour seminar (x2 we	bility. or pass GG3203 eeks), 2- hour ady: 182 hours		

#### **GG4223 Advanced Quantitative Analysis**

SCOTCAT Credits:	20	SCQF Level 10	Semester	1	
Academic year:	2019/0				
Availability restrictions:	Not automatically a	vailable to General De	gree students		
Planned timetable:	Lectures - 1.00 pm	- 2.00 pm Fri. Practicals	s - 2.00 pm - 4.00 pm Tue		

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.

Pre-requisite(s):	Before taking this module you must pass (	GG3201 or pass GG3202 or pass GG3203	
Learning and teaching	Weekly contact: 1 Hour Lecture x 11 weeks, 2 Hour Practical Lab x 11 weeks		
methods of delivery:	Scheduled learning: 33 hours	Guided independent study: 176 hours	
Accessment matterns	As defined by QAA: Written Examinations = 0%, Practical Examinations = 13%, Coursework = 87%		
Assessment pattern:	As used by St Andrews: Practical Examination = 13%, Coursework	= 87%	
Re-assessment pattern:	Coursework project = 100%		
Module coordinator:	Dr K L Keenan		
Module teaching staff:	Team taught: Dr Katherine Keenan, Dr Jo	Hale, Prof. Hill Kulu	

#### **GG4224 Advanced Topics in Physical Sciences**

SCOTCAT Credits:	20	SCQF Level 10	Semester	1		
Academic year:	2019/0	2019/0				
Availability restrictions:	Not automatically a	vailable to General De	gree students			
Planned timetable:	Lectures - 2.00 pm	- 3.00 pm Thurs Praction	cals - 3.00 pm - 5.00 pm T	hurs		

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.

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Pre-requisite(s):	Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203			
Learning and teaching	Weekly contact: 2 hour lectures (x 9 weeks) and 1 x 1-day (4 hour) field class.			
methods of delivery:	Scheduled learning: 22 hours	Guided independent study: 178 hours		
Accommon matters.	As defined by QAA: Written Examinations = 0%, Practical Exam	minations = 0%, Coursework = 100%		
Assessment pattern:	As used by St Andrews: Coursework = 100%			
Re-assessment pattern:	Coursework project = 100%			
Module coordinator:	Dr R T Streeter			
Module teaching staff:	Team taught			

#### GG4228 Advanced Topics in Geographic Information Science (GISci)

SCOTCAT Credits:	20	SCQF Level 10	Semester	1
Academic year:	2019/0			
Availability restrictions:	Core – available eve	ry year. Not automatio	cally available to General D	egree students
Planned timetable:	Lecture Days - Mone	day 13:00 to 15:00. Pra	ctical Class Days - Monday	15:00 to 17:00

The first part of the course explores advanced spatial analysis techniques for use with geographic datasets. Students will gain theoretical and applied knowledge to study and describe spatial patterns in geographic data. Theoretical understanding will be emphasized through lectures and readings. Labs will be designed to provide students with hands-on experience applying theory and techniques to datasets spanning human and environmental geography in applications such as crime, forestry, health and environmental change. In the second part of the course 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 or physical geography will be able to tailor GIS projects to their own interests

Pre-requisite(s):	Before taking this module you must pass GG3201				
Learning and teaching	Weekly contact: Scheduled learning: 36 hours Guided independent study: 164 hours				
methods of delivery:					
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
Assessment pattern:	As used by St Andrews:  1. IT Practicals (50%) - 2 x 25% IT lab assignments based on Analysing Spatial Point data, Spatial Autocorrelation Analysis, and/or Geographically Weighted Regression. 2. GIS project (50%) - Students will work on a topic/dataset of their own choosing. Perform an analysis using the skills learned in this course. Students will submit a written report in the form of a scientific article				
Re-assessment pattern:	100% GIS Project				
Module coordinator:	Dr U Demsar				
Module teaching staff:	Dr Urska Demsar				

#### GG4297 Joint Honours Research Dissertation in Geography

SCOTCAT Credits:	30	SCQF Level 10	Semester	2
Academic year:	2019/0			
Availability restrictions:	Core – available every year. Not automatically available to General Degree students			
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/).

Pre-requisite(s):	Before taking this module you must pass GG3202 or pass SG3202			
Anti-requisite(s)	You cannot take this module if you take GG4298			
Learning and teaching	<b>Weekly contact</b> : Up to 8 hours of guided study per student over the semesto-one supervision, by arrangement with supervisor)			
methods of delivery:	Scheduled learning: 8 hours Guided independent study: 292 hour			
Account notions	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
Assessment pattern:	As used by St Andrews: Dissertation = 100%			
Re-assessment pattern:	Oral Examination = 100%			
Module coordinator:	Dr S Leahy	Dr S Leahy		
Module teaching staff:	Team taught			

# Geography & Sustainable Development - Honours Level - 2019/0 - September - 2019

SCOTCAT Credits:	50	SCQF Level 10	Semester	2	
Academic year:	2019/0	2019/0			
Availability restrictions:	Core – available eve	Core – available every year. Not automatically available to General Degree students			
Planned timetable:	To be arranged.				
degree is based. It provide of empirical research under piece of research that rep component of the disserta their work to members of the and hinding dissertations of	er the supervision of a presents the culmination is the annual Sen the school and to Junior	member of staff. In of substantive a ior Honours Resea Honours students a	The dissertation is a nd core training in or rch Conference at w as an oral presentation	substantial, independ Geography. An import which all students pres on.(Guidelines for prin	
Pre-requisite(s):	1	n be found at: http://www.st-andrews.ac.uk/printanddesign/dissertation/)  Before taking this module you must pass GG3201 or pass GG3203			
Anti-requisite(s)	You cannot take this	You cannot take this module if you take GG4297			
Learning and teaching methods of delivery:	Weekly contact: Up to 8 hours of guided study per student over the semester (or to-one supervision, by arrangement with supervisor), plus a 1 day (8-hour) conference				
	Scheduled learning	: 16 hours	Guided independ	dent study: 490 hours	
As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				oursework = 100%	
According to the unit	As used by St Andrews: Dissertation and Conference presentation = 100%				
Assessment pattern:			ion = 100%	Joursework 100%	
Assessment pattern:  Re-assessment pattern:		nference presentat	ion = 100%	Journal Took	
	Dissertation and Co	nference presentat	ion = 100%	100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10 100/10	

### Sustainable Development (SD) Modules

#### SD3100 Methodologies for Sustainable Development

SCOTCAT Credits:	30	SCQF Level 9	Semester	2	
Academic year:	2019/0				
Planned timetable:	Lectures - 14:.00 - 1	Lectures - 14:.00 - 17:00 Tuesdays			

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.

Pre-requisite(s):	Students require 30 credits in sd modules at 3000- or 4000-level. Before taking this module you must take SD2002			
Anti-requisite(s)	You cannot take this module if you take SG3201 or take SG3202 or take SG3203 or take SG3204 or take GG3201			
Learning and teaching	<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)			
methods of delivery:	Scheduled learning: 57 hours Guided independent study: 252 hours			
Accessment mattern.	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
Assessment pattern:	As used by St Andrews: Coursework = 100%			
Re-assessment pattern:	Coursework = 100%			
Module coordinator:	Dr R M White			
Module teaching staff:	Team taught			

#### SD4110 Transitioning to sustainability: community, nature and governance

SCOTCAT Credits:	30	SCQF Level 10	Semester	2
Academic year:	2019/0			
Availability restrictions:	Offered on a two year cycle			
Planned timetable:	Tuesday 10am-1pm			

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.

Pre-requisite(s):	Before taking this module you must pass SD2002			
Anti-requisite(s)	You cannot take this module if you take SD3225			
Learning and teaching	<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)			
methods of delivery:	Scheduled learning: 57 hours	Guided independent study: 244 hours		
Accommon matters.	As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%			
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60%			
Re-assessment pattern:	2-hour Written Examination = 100%			
Module coordinator:	Dr R M White			

Module teaching staff:	Dr R White					
113 Environment and Develop	3 Environment and Development Economics					
SCOTCAT Credits:	30	SCQF Level 10	Semester	1		
Academic year:	2019/0					
Availability restrictions:	Not automatically available to General Degree students					
Planned timetable:	Wed 11:00am - 1:00pm					
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.						
Pre-requisite(s):	Before taking this n	nodule you must take S	SD2002			
Anti-requisite(s)	You cannot take this module if you take SD3224 or take SD5101					
Learning and teaching	Weekly contact: To	wo 1-hour lectures (x10	) weeks), Two practicals (x	x4 weeks)		
methods of delivery:	Scheduled learning	: 28 hours	Guided independent stu	<b>dy:</b> 270 hours		
Assassment nottorn	Assessment pattern:  Assessment pattern:  Assessment pattern:  As defined by QAA:  Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%  As used by St Andrews:  Coursework = 50%, 2-hour Written Examination = 50%					
Assessment pattern.						
Re-assessment pattern:	2-hour Written Exa	2-hour Written Examination = 100%				
Module coordinator:	Dr E McLaughlin					
Module teaching staff:	TBC					

SCOTCAT Credits:	30	SCQF Level 10	Semester	1	
Academic year:	2019/0	2019/0			
Availability restrictions:	Not automatically available to General Degree students				
Planned timetable:	Lectures - Tuesday	Lectures - Tuesday 10:00 - 11:00; Practicals - Tuesday 11:00 - 13:00			
attention in sustainable dominated by techno-ecor of everyday life that are fu how societies manage ess implement and reflect or challenge students to thin	nomic thinking which ndamental determinential but ordinary an intervention to	n overlooks social organ nants of an individual's of forms of consumption, o make their local com	isation of some of the more environmental impact. As we the module also expects s munity more sustainable.	e ordinary aspe well as consider tudents to design This module v	
Pre-requisite(s):	Before taking this	module you must pass	SD2002 and pass SD2001		
Learning and teaching	· ·	One 1-hour lecture (x10 presentation session (x	weeks), One 2-hour semii 1 week)	nar (x9 weeks),	
methods of delivery:	Scheduled learning	g: 30 hours	Guided independent stu	dy: 275 hours	
As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%					
Accoccment nattern	•		aminations = 0%, Coursew	ork = 60%	
Assessment pattern:	Written Examinat  As used by St And	ions = 40%, Practical Ex		ork = 60%	
Assessment pattern:  Re-assessment pattern:	Written Examinat  As used by St And	ions = 40%, Practical Ex  rews: 6, 2-hour Written Exami		rork = 60%	
·	Written Examinat  As used by St And  Coursework = 60%	tions = 40%, Practical Ex Irews: 6, 2-hour Written Exami amination = 100%		ork = 60%	

# SD4225 Green Politics: theory and practice

SCOTCAT Credits:	30	SCQF Level 10	Semester	2
Academic year:	2019/0			
Planned timetable:	To be confirmed			

This module explores the theory & practice of environmental politics in issues of Sustainable Development. Drawing on concepts from Politics & International Relations we will critically analyze past & current environmental challenges and discourses. The module pays particular attention to the political actors involved in contemporary Sustainable Development issues, to their interests and behaviours. It includes a comparative political analysis element as well as a global environmental governance dimension. Distinct features of this module are - the use of policy briefings as written assignments, tutorial discussion papers, as well as a practitioner involvement.

Pre-requisite(s):	Before taking this module you must ( pass SD2001 and pass SD2002 ) or ( pass IR2005 and pass IR2006 )		
Anti-requisite(s)	You cannot take this module if you take IR4552		
Learning and teaching	Weekly contact: 1 hour lecture (11 weeks), 2 hour tutorials (11 weeks)		
methods of delivery:	Scheduled learning: 33 hours Guided independent study: 268 hours		
A consequent mothers	As defined by QAA: Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%		
Assessment pattern:	As used by St Andrews: 3-hour Written Examination = 50%, Coursework = 50%		
Re-assessment pattern:	3-hour Written Examination = 100%		
Module teaching staff:	Dr Antje Brown		

#### SD4226 Global Health Disparities

SCOTCAT Credits:	30	SCQF Level 10	Semester	1
Academic year:	2019/0			
Planned timetable:	Lecture (Friday 10am-1pm), Practical (Friday 10am-1pm)			

This module focuses on contemporary global health issues, with emphasis placed on contextualizing global, national, and subnational health disparities. We will study how health, the environment, and sustainable development are interrelated and work to improve our understanding of both policy and practice. Therefore, students will be introduced to important actors and their stated goals, such as the WHO, IMF, OECD, MDGs, and SDGs. We will examine cases from low- and middle-income countries, as well as from high-income countries. We will take an interdisciplinary approach, using various perspectives including sociology, bioethics, epidemiology, anthropology, clinical medicine, and political science. The module will involve lectures, seminars, and practical classes. Assessment will include presentations and coursework.

Pre-requisite(s):	Before taking this module you must ( pass SD2001 and pass SD2002 ) or ( pass GG2011 and pass GG2012 )		
Learning and teaching methods of delivery:	Weekly contact: 1 hour lectures (10 weeks), 2 hour seminars (10 weeks), 3 hour practical (statistical literacy workshop) (1 week)		
	Scheduled learning: 33 hours	Guided independent study: 267 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	Coursework = 100%		
Module coordinator:	Dr J M Hale		
Module teaching staff:	Dr Jo Mhairi Hale		

#### Geography & Sustainable Development - Honours Level - 2019/0 - September - 2019

#### SD4297 Dissertation in Sustainable Development

SCOTCAT Credits:	30	SCQF Level 10	Semester	2
Academic year:	2019/0			
Availability restrictions:	Available only to Sustainable Development Honours students.			
Planned timetable:	To be arranged.			

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.

Pre-requisite(s):	Before taking this module you must take SD3100 or take SG3201 or take SG3203 or take SG3204		
Anti-requisite(s)	You cannot take this module if you take SD4299		
Learning and teaching methods of delivery:	<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)		
	Scheduled learning: 30 hours	Guided independent study: 270 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 5%, Coursework = 95%		
	As used by St Andrews: Coursework (10,000-word dissertation = 95%, oral or poster presentation a student research conference = 5%) = 100%		
Re-assessment pattern:	10,000-word Dissertation = 100%		
Module coordinator:	Dr R M White		
Module teaching staff:	Team taught		