GG3201 Single Honours Research Design and Methodology Training (60)

SCOTCAT Credits:	60	SCQF level 9	Semester	2	
Academic year:	2020-2021				
Planned timetable:	To be arranged.				

This module occupies a central place in our 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: • Research project design • Qualitative and quantitative data collection and analysis • Use of secondary data • Research ethics and risk assessment • Geographical Information Systems (GIS) and remote sensing. There is opportunity for streaming and choice amongst units covering these themes. 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 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 12 hours of contact time (x 10 weeks).		
inections of delivery.	Scheduled learning: 120 hours	Guided independent study: 480 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 I T Lawson		
Module teaching staff:	Team taught		

GG3202 Joint Honours Research Design and Methodology Training (30)

SCOTCAT Credits:	30	SCQF level 9	Semester	2
Academic year:	2020-2021			
Planned timetable:	To be arranged.			

"This module occupies a central place in our 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: • Research project design • Qualitative and quantitative data collection and analysis • Use of secondary data • Research ethics and risk assessment • Geographical Information Systems (GIS) and remote sensing. There is opportunity for streaming and choice amongst units covering these themes. 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 GG3201 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 (x 7.5 weeks).		
inethous of delivery.	Scheduled learning: 75 hours	Guided independent study: 225 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	No Re-assessment available		
Module coordinator:	Dr I T Lawson		
Module teaching staff:	Team taught		

GG3203 Research Design and Methodology Training (50) SCOTCAT Credits: 50 SCQF level 9 Semester 2 Academic year: 2020-2021 Availability restrictions: Not available to General Degree Students. Planned timetable: To be arranged. This module occupies a central place in our research-orientated degree. It prepares students to undertake their independent research dissertation and develops transferable professional skills useful beyond graduation.

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: • Research project design • Qualitative and quantitative data collection and analysis • Use of secondary data • Research ethics and risk assessment • Geographical Information Systems (GIS) and remote sensing. There is opportunity for streaming and choice amongst units covering these themes. 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 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 nottown	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 I T Lawson		
Module teaching staff:	Team taught		

GG3204 Research Design and Methodology Training (40)

SCOTCAT Credits:	40	SCQF level 9	Semester	2	
Academic year:	2020-2021				
Availability restrictions:	Not available to General Degree Students.				
Planned timetable:	To be arranged.				

"This module occupies a central place in our 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: • Research project design • Qualitative and quantitative data collection and analysis • Use of secondary data • Research ethics and risk assessment • Geographical Information Systems (GIS) and remote sensing. There is opportunity for streaming and choice amongst units covering these themes. The module concludes with students producing an independent research proposal for their Senior Honours dissertation projects."

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 weeks) plus a fieldclass.		
methods of delivery.	Scheduled learning: 104 hours	Guided independent study: 296 hours	
Accordment nattorn	As defined by QAA: Written Examinations = 0%, Practical Examinations = 15%, Coursework = 85%		
Assessment pattern:	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	No Re-assessment available		
Module coordinator:	Dr I T Lawson		
Module teaching staff:	Team taught		

GG3227 Colonial and Postcolonial Geographies

SCOTCAT Credits:	20	SCQF level 9	Semester	1	
Academic year:	2020-2021				
Availability restrictions:	Offered on a two-year cycle				
Planned timetable:	2:00 - 4:00 pm Friday				

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.

Pre-requisite(s):	Before taking this module you must (pass GG2011 and pass GG2012) or (pass SD2001 and pass SD2002) $$			
Learning and teaching methods of delivery:	Weekly contact : 1hr x 11 weeks online lectures - interactive (Teams, recorded) - in the designated class hour. Content pre-recorded in 15 minute segments, 3 x 15 min segments per session (30 in total). 1 x 11 week tutorials - interactive (Teams, recorded) with group work - in designated class hour"			
	Scheduled learning: 24 hours	Guided independent study: 176 hours		
Accessment nottown	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
Assessment pattern:	As used by St Andrews: 100% continual assessment.			
Re-assessment pattern:	100% continual assessment.			
Module coordinator:	Dr D W Clayton			

GG3229 Environmental Management in Scotland

SCOTCAT Credits:	20	SCQF level 9	Semester	1
Academic year:	2020-2021			
Availability restrictions:	Offered on a two-year cycle.			
Planned timetable:	09:00 - 11:00 Tuesday			

This module explores current environmental management issues in Scotland. It discusses the primary sectors of land and resource management (e.g. forestry, agriculture, wildlife management, freshwater resource management, conservation, renewable energy), and explores how these systems interact. The aim is to leave students with an informed conceptual and empirical framework for evaluating management proposals and their implications for environmental, economic and social change. A particular focus, employing topical case studies and a field visit, is the conflicts that arise as interest groups with contrasting philosophies & value systems compete to shape the future of Scotland's natural heritage within a devolved political framework and in the context of climate change.

Pre-requisite(s):	Before taking this module you must (pass GG2011 and pass GG2012) or (pass SD2001 and pass SD2002) $$		
Learning and teaching	Weekly contact: 2hr x 10 weeks online lectures, 2hr x 10 weeks of drop-in 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 = 60%, Practical Examination = 20%, Coursework = 20%		
Re-assessment pattern:	2-hour Written Examination = 60%, Practical Examination = 20%, Coursework = 20%		
Module coordinator:	Dr C R Warren		

GG3234 Migration and Transnationalism

SCOTCAT Credits:	20	SCQF level 9	Semester	1
Academic year:	2020-2021			
Availability restrictions:	Offered on a two-year cycle			
Planned timetable:	11:00 am - 1:00 pm Tuesday			

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.

Pre-requisite(s):	Before taking this module you must (pass GG2011 and pass GG2012) or (pass SD2001 and pass SD2002)		
Learning and teaching methods of delivery:	Weekly contact : 1hr x 9 weeks online lectures, 1hr x 9 weeks seminars, 2hr x 1 week mini-conference		
	Scheduled learning: 22 hours	Guided independent study: 178 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: 100% continual assessment.		
Re-assessment pattern:	100% continual assessment.		
Module coordinator:	Dr D McCollum		

GG3238 Development: voice, power and identity in global times

SCOTCAT Credits:	20	SCQF level 9	Semester	1
Academic year:	2020-2021			
Planned timetable:	11:00am - 1:00pm Mondays			

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.

Pre-requisite(s):	Before taking this module you must take GG2012 or take SD2002		
Learning and teaching methods of delivery:	Weekly contact: 1 hour lecture x 11 (online), 2 x 1 hour seminar/workshop x 11 weeks, 2 x 1 hour office hours x 11 weeks		
methous of delivery.	Scheduled learning: 0 hours	Guided independent study: 0 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews:		
	100% continual assessment.		
Re-assessment pattern:	100% continual assessment.		
Module coordinator:	Professor N D Laurie		
Module teaching staff:	Prof N Laurie		

GG3242 Geographies of the Life Course

SCOTCAT Credits:	20	SCQF level 9	Semester	1
Academic year:	2020-2021			
Planned timetable:	10:00 am - 12:00 pm Thursday			

Since the 1960s the life course approach has become one of the most influential paradigms in the social sciences. It emphasises how human development is a life-long process and promotes understanding human activity through a greater awareness of the geographical, historical and cultural context in which people are situated. It provides a way of understanding inequalities as cumulative or long-term processes. This module will provide an introduction to the life course approach and how it applies to key areas of human geography, covering the demographic processes such as family building (childbearing and partnership), migration and mobilities, ageing and health disparities. This will incorporate the study of various life course stages and transitions between them (childhood, adolescence, adulthood and older age), and the production of social and health inequalities throughout the lifespan. The module will teach students how to read and apprise both qualitative and quantitative research papers. The module is taught through lectures, in person or online discussion seminars, and assessment is all coursework: a class presentation, a critical summary task and a choice of 3,000 word essay.

Pre-requisite(s):	Before taking this module you must pass GG2011 and pass GG2012		
Learning and teaching methods of delivery:	Weekly contact : 9 lecture/seminars (x 2 hours) on life course topics, 1 seminar (x 2 hours) on reading and appraising quantitative research papers, student presentations and feedback (x 4 hours)		
	Scheduled learning: 29 hours	Guided independent study: 180 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: 100% continual assessment		
Re-assessment pattern:	100% continual assessment		
Module coordinator:	Dr K L Keenan		
Module teaching staff:	Dr K Keenan	Dr K Keenan	

GG3263 Glaciers and Glaciation

SCOTCAT Credits:	20	SCQF level 9	Semester	1
Academic year:	2020-2021			
Availability restrictions:	Availability TBC - Offered on a two-year cycle			
Planned timetable:	Tue 2-3 & Thu 2-3			

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.

Pre-requisite(s):	Before taking this module you must pass GG2011 and pass GG2012		
Learning and teaching	Weekly contact: 2 x 1 hr per week for 9 weeks online lectures and seminars		
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 = 100%		
	As used by St Andrews: 100% continual assessment.		
Re-assessment pattern:	100% continual assessment.		
Module coordinator:	Professor D I Benn		
Module teaching staff:	Prof D I Benn		

GG3272 Biogeography and the Earth System

SCOTCAT Credits:	20	SCQF level 9	Semester	1
Academic year:	2020-2021			
Availability restrictions:	Offered on a two-year cycle			
Planned timetable:	Mon 10-1			

Planet Earth appears to be unique as the home of life. Biological processes are deeply woven into the fabric of the physical world and human societies. The resulting interactions, at every scale from microscopic to global, are fundamental to the geography of our planet. This module explores the discipline of biogeography, which describes and explains the distribution of different life forms (species, communities) across the Earth. In lectures, seminars and in the field, we will investigate the fundamental controls on the distribution of life, and engage with ongoing debates. The module goes on to consider the role of biology in the Earth system as a whole, focusing on the cycling of key elements including carbon, nitrogen and phosphorus ¿ the behaviour of which has huge ramifications for society today. Finally, using examples from around the globe, we will look at biogeographical changes in the Anthropocene, and consider the challenges for conservation and development.

Learning and teaching	Weekly contact: 3 hour seminar/lecture/workshop x 10 weeks		
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 = 100%		
	As used by St Andrews: 100% continual assessment.		
Re-assessment pattern:	100% continual assessment.		
Module coordinator:	Dr I T Lawson		
Module teaching staff:	Dr I Lawson, Dr K Roucoux		

GG3273 Scrutinising Segregation: Geographies of Diversity and Inequality

SCOTCAT Credits:	20	SCQF level 9	Semester	1
Academic year:	2020-2021			
Planned timetable:	11:00am - 1:00pm Wednesday			

Is Britain residentially segregated? How do we know this? What social and population processes shape segregation? Along what lines (race, religion, class) is segregation considered? Why does segregation matter? How has the question of the patterning of where people live become connected to international relations and national security? Through consideration of these questions we will think critically about diversity and inequality, and how these salient social themes have been thought about academically and politically. We will examine the evidence on segregation and how this has been appropriated and misappropriated, and we will discover what Geographers can contribute, conceptually and methodologically, to these debates.

Learning and teaching methods of delivery:	Weekly contact: 1 x 1-hour seminar (x 11 weeks), 1 x 1-hour lecture (x 11 weeks)		
	Scheduled learning: 0 hours	Guided independent study: 0 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
	As used by St Andrews: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
Re-assessment pattern:	Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
Module coordinator:	Dr N Finney		

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

SCOTCAT Credits:	10	SCQF level 9	Semester	1
Academic year:	2020-2021			
Availability restrictions:	Entry to a Joint or Major Honours programme in Geography.			
Planned timetable:	timetable to be confirmed.			

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.

module but undertake a separate assessment.			
Pre-requisite(s):	Before taking this module you must pass GG2011 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 assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.		
	Scheduled learning: 23 hours	Guided independent study: 77 hours	
	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 I T Lawson		
Module teaching staff:	Various		

SCOTCAT Credits:	10	SCQF level 9	Semester	1	
Academic year:	2020-2021				
Availability restrictions:	Entry to a Joint or Major Honours programme in Geography				
Planned timetable:	timetable to be con	firmed.			
This module is designed t of a selected 20-credit op semesters of their Hono undertake a separate asso	tional module in Geo ours programme. Stu	graphy (GG3221 - G	G3289) yet balance the v	workload across the	
Pre-requisite(s):	Before taking this module you must pass GG2011 and pass GG2012				
Learning and teaching methods of delivery:	Weekly contact : Students undetake the lecture/seminar contact hours associated with any 3000-level GG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.				
	Scheduled learning:	: 23 hours	Guided independen	t study: 77 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			ework = 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				

1 Advanced Debates in Geography						
SCOTCAT Credits:	10 SCQF level 10 Semester 2					
Academic year:	2020-2021					
Availability restrictions:	Core – available eve	ery year. Not automation	cally available to General D	egree students		
Planned timetable:	To be arranged.					
encourage student to stu- climate change, globalisati examined with a single thre address the nature of geo applied to significant conte	ion, the nature of some-hour examination graphy as a disciplin mporary issues.	ocial inequality, the in comprised of a mixtur he and the way in wh	nterface between nature e of seen and unseen exar ich geographical reasonin	and culture). It is n questions. These g has or might be		
Pre-requisite(s):	Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203 or pass GG3204					
Learning and teaching	Weekly contact: 6	x 2-hour seminars duri	ng the semester.	teaching Weekly contact: 6 x 2-hour seminars during the semester.		
methods of delivery:	Cahadulad laavaina					
methods of delivery.	Scheduled learning	: 12 hours	Guided independent stud	dy: 88 hours		
·	As defined by QAA:	:	Guided independent stud	·		
Assessment pattern:	As defined by QAA:	ens = 100%, Practical Ex Pews:	·	·		

Module coordinator:	Dr R T Streeter
Module teaching staff:	Team taught

SCOTCAT Credits:	20	SCQF level 10	Semester	1	
Academic year:	2020-2021	2020-2021			
Availability restrictions:	Core - available every year				
Planned timetable:	5.00 pm - 6.00 pm	Thu			
This elective requires students, working independently, to identify and critically review a body of literature, giving an account of its substantive content, and critically assessing the evidence on which it is based. Students can either identify an intellectual field that lies outside those addressed in available 3000-level options modules, or build on a field covered in the programme, pursuing it at greater depth. In addition to supervisory sessions and module tutorials, students may also attend sessions in a relevant 3000-level option module running in the same semester.					
Pre-requisite(s):	Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203				
Anti-requisite(s)	You cannot take this module if you take GE4019				
Learning and teaching	Weekly contact: Introductory lecture and seminar (2 hours) followed by guided independent study (one-to-one supervision)				
methods of delivery:	Scheduled learning	g: 2 hours	Guided independ	ent study: 198 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%				
·	As used by St Andrews: Coursework = 100%				
Re-assessment pattern:	Review Essay = 100	0%			
Module coordinator:	Dr R T Streeter				
	Team taught				

2 Advanced Qualitative An	alysis					
SCOTCAT Credits:	20	SCQF level 10	Semester	1		
Academic year:	2020-2021	2020-2021				
Availability restrictions:	Not automatically a	Not automatically available to General Degree students				
Planned timetable:	2.00 pm - 4.00 pm T	2.00 pm - 4.00 pm Thu				
1 , 0	ourse analysis, deconstr	uction, grounded theory)	terview transcripts) using a rai Research data are drawn from GG3201 or pass GG3202 or	om a range of areas		
Learning and teaching		Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203 Weekly contact: 3 hour seminar/lecture/workshop x 10 weeks				
methods of delivery:	Scheduled learning: 18 hours Guided independent study: 18		dy: 182 hours			
Accoccment nottorn	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
Assessment pattern:	As used by St Andrews: 100% continual assessment.					
Re-assessment pattern:	100% continual assessment.					
Module coordinator:	Dr M B Sothern					
	•					

Team taught module

Module teaching staff:

GG4223 Advanced Quantitative Analysis

SCOTCAT Credits:	20	SCQF level 10	Semester	1
Academic year:	2020-2021			
Availability restrictions:	Not automatically available to General Degree students			
Planned timetable:	Lecture Tue 1-3; Practical Tue 3-5			

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 : 2 hour lecture x 7 weeks, 2 hour lab x 7 weeks, 4 hour drop in session x 2 weeks, 4 hour class presentation session x 1 week.		
methods of delivery:	Scheduled learning: 40 hours	Guided independent study: 160 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 13%, Coursework = 87%		
	As used by St Andrews: Practical Examination = 13%, Coursework = 87%		
Re-assessment pattern:	Coursework project = 100%		
Module 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:	2020-2021			
Availability restrictions:	Not automatically available to General Degree students			
Planned timetable:	Lectures – 12 noon - 3.00 pm Thurs Practicals - 3.00 pm - 5.00 pm Thurs			

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. Various topics are offered each year that build on material explored in 3000-level Honours modules, and which expand and deepen students' practical skill set. 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. Assessment is entirely by coursework (structured data analysis reports). The module complements and expands the learning acquired in GG3201-4, and provides additional resources for the development of students' individual dissertation projects.

Pre-requisite(s):	Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203		
Learning and teaching	Weekly contact: 3-hour lecture/seminar/practical sessions (x 10 weeks)		
methods of delivery:	Scheduled learning: 30 hours	Guided independent study: 170 hours	
	As defined by QAA:		
Assessment pattern:	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		

Re-assessment pattern:	Coursework project = 100%	
Module coordinator:	Dr R T Streeter	
Module teaching staff:	Team taught	

228 Advanced Topics in Geog	8 Advanced Topics in Geographic Information Science (GISci)				
SCOTCAT Credits:	20	SCQF level 10	Semester	1	
Academic year:	2020-2021				
Availability restrictions:	Core – available eve	ry year. Not automatic	ally available to General De	egree students	
Planned timetable:	,	ecture Days - Monday 13:00 to 15:00. Practical Class Days - Monday 15:00 to 17:00; Additional practical Wks 8 and 9			
Students will gain theored Theoretical understanding students with hands-on environmental geography part of the course stude advanced GIS skills. The p	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				
Pre-requisite(s):	~	odule you must pass G GIS) in one of these mo	G3201 or GG3202 or GG32 dules.	03 and have taken	
Learning and teaching methods of delivery:	Weekly contact : 2hr x 6 weeks online lectures, 2hr x 1 week online career event (GIS Day), 2hr x 6 weeks labs (online via remote access to university labs), 2hr x 4 weeks help sessions for projects (online via remote access to university labs and/or in person)				
	Scheduled learning:		Guided independent stud	ly: 164 hours	
	As defined by QAA: Written Examinatio		ninations = 0%, Coursework	κ = 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 T Bolch				
Module teaching staff:	Dr Urska Demsar, Di	Tobias Bolch			

Joint Honours Research D	1		<u> </u>	
SCOTCAT Credits:	30	SCQF level 10	Semester	2
Academic year:	2020-2021			
Availability restrictions:	Core – available every year. Not automatically available to General Degree students			
Planned timetable:	To be arrange	ed.		
The research dissertation based. It provides studen empirical research under the of research that represent printing and binding dissert	ts with the oppose supervision of the culmination	portunity to design and of a member of staff. The on of both substantive a	d undertake an indep e dissertation is a subs and core training in Ge	pendent, original piece tantial, independent piece eography. (Guidelines fo
Pre-requisite(s):	Before taking	Before taking this module you must pass GG3202		
Anti-requisite(s)	You cannot to	You cannot take this module if you take GG4298		
Learning and teaching methods of delivery:	-	act: Up to 8 hours of gu	* *	t over the semester (one
methous of delivery.	Scheduled le	arning: 8 hours	Guided indepen	dent study: 292 hours
Accessment nottorn	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			oursework = 100%
As used by St Andrews: Dissertation = 100%				
		Oral Examination = 100%		
Re-assessment pattern:	Oral Examina	tion = 100%		

SCOTCAT Credits:	50	SCQF level 10	9	Semester	2	
Academic year:	2020-2021	2020-2021				
Availability restrictions:	Core – availa	Core – available every year. Not automatically available to General Degree students				
Planned timetable:	To be arrang	ed.				
piece of research that rep	presents the cu	lmination of substantiv	e and o	core training in (Geography An im	
their work to members of	ation is the anr of the school a	nual Senior Honours Re nd to Junior Honours	search student	Conference at was as an oral pre	which all students esentation.(Guidel	prese ines f
component of the dissert their work to members of printing and binding disser Pre-requisite(s):	ation is the anr of the school a rtations can be f	nual Senior Honours Re nd to Junior Honours	search student t-andre	Conference at was as an oral prews.ac.uk/printan	which all students esentation.(Guidel addesign/dissertati	prese ines f
their work to members of printing and binding disser	ation is the anr of the school ar rtations can be f Before takin	nual Senior Honours Rend to Junior Honours ound at: http://www.s	search student t-andre pass G0	Conference at was as an oral prews.ac.uk/printan	which all students esentation.(Guidel addesign/dissertati	prese ines f
their work to members of printing and binding disser	ation is the anr of the school ar rtations can be f Before takin You cannot t Weekly cont	nual Senior Honours Rend to Junior Honours ound at: http://www.sg this module you must	search student t-andre pass GC take GG uided st	Conference at was as an oral prews.ac.uk/printan G3201 or pass GC 4297 cudy per student	which all students esentation.(Guidel addesign/dissertati G3203	prese ines fo ion/)
their work to members of printing and binding disser Pre-requisite(s): Anti-requisite(s) Learning and teaching	ation is the anrof the school artations can be f Before takin You cannot t Weekly cont to-one super	nual Senior Honours Rend to Junior Honours ound at: http://www.sg this module you must take this module if you stact: Up to 8 hours of g	search student t-andre pass GG take GG uided st	Conference at was as an oral prews.ac.uk/printan G3201 or pass GG 4297 Eudy per student Ipervisor), plus a	which all students esentation.(Guidel addesign/dissertati G3203	prese ines f ion/) r (one
their work to members of printing and binding disser Pre-requisite(s): Anti-requisite(s) Learning and teaching	ation is the anrof the school artations can be f Before taking You cannot t Weekly cont to-one super Scheduled le	nual Senior Honours Rend to Junior Honours ound at: http://www.sg this module you must take this module if you tact: Up to 8 hours of graining: 16 hours	ssearch student t-andre pass GC take GG uided st with su	Conference at was as an oral prews.ac.uk/printan G3201 or pass G0 4297 Eudy per student Expervisor), plus a	which all students esentation.(Guidel addesign/dissertations) G3203 over the semester 1 day (8-hour) condent study: 490 hours)	prese ines f ion/) r (one nferer

Module teaching staff:

Team taught

Re-assessment pattern:	Oral Examination = 100%	
Module coordinator:	Dr R T Streeter	
Module teaching staff:	Team taught	

SCOTCAT Credits:	30	SCQF level 9	Semester	2
Academic year:	2020-2021			
Planned timetable:	Lectures - 14:.00 - 17:00 Tuesdays			
This module prepares stude builds on the research me execute a research project and within appropriate interning in a real world sesurrounding interdisciplinate to design rigorous me	ethods explored in out, how to situate result of the control of th	other SD honours mearch questions in the ures. A group research group this module will define problems and these questions.	odules. Students will ne broader agenda of the project provides the understand the wide form tractable reseasy the end of the mod	learn how to design an Sustainable Developmer copportunity to apply the repistemological debate arch questions as well a ule each student will hav
developed a research prop				
Pre-requisite(s):	Students require 3 module you must t		les at 3000- or 4000-le	evel. Before taking this
Anti-requisite(s)	You cannot take th SG3204 or take GG	•	SG3201 or take SG32	02 or take SG3203 or tal
Learning and teaching	Weekly contact: 1 world investigation	•	7 weeks); 1 x 3-hour p	practical (x 3 weeks); rea
methods of delivery:	Scheduled learning	g: 57 hours	Guided independ	ent study: 252 hours
Assessment nettown.	As defined by QAA Written Examinati		xaminations = 0%, Cou	ursework = 100%
Assessment pattern:	As used by St Andi 100% continual ass			
Re-assessment pattern:	100% continual ass	100% continual assessment.		
	Dr R M White			

Module teaching staff:

Team taught

SD3111 Home and Energy Geographies

SCOTCAT Credits:	30	SCQF level 9	Semester	1
Academic year:	2020-2021			
Planned timetable:	10:00am - 1:00pm	Thursdays (lectures)		

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.

Pre-requisite(s):	Before taking this module you must take S	D2002 or take GG2012	
Anti-requisite(s)	You cannot take this module if you take SD3221		
Learning and teaching	Weekly contact: One 2-hour lecture (x11 weeks), One 1-hour seminar (x9 week Scheduled learning: 0 hours Guided independent study: 0 hours		
methods of delivery:			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
Assessment pattern.	As used by St Andrews: 100% continual assessment.		
Re-assessment pattern:	100% continual assessment.		
Module coordinator:	Dr L A Reid		
Module teaching staff:	Dr L Reid		

SCOTCAT Credits: 30 SCQF level 10 Semester 1 Academic year: 2020-2021 Availability restrictions: Not automatically available to General Degree students Planned timetable: Lecture Fri 9-10; Practical Fri 10-12 with additional WK 11 10-1

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. This course will draw on examines predominantly from the marine and coastal environment. 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

Pre-requisite(s):	Before taking this module you must take SD2002		
Anti-requisite(s)	You cannot take this module if you take SD3222		
Learning and teaching methods of delivery:	Weekly contact : 1-hour x 10 weeks online lectures (i.e. excluding reading week 6), 2-hour seminars (x2 weeks) in person AND online realtime (dual delivery), 2-hour practicals (x4 weeks) in person AND online realtime (dual delivery), 1x 3 hour online game.		
	Scheduled learning: 0 hours Guided independent study: 0 hours		
A	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0% As used by St Andrews: 50% Exam & 50% continual assessment		
Assessment pattern:			
Re-assessment pattern:	50% Exam & 50% continual assessment		
Module coordinator:	Dr T A Stojanovic		
Module teaching staff:	Dr T Stojanovic		

SD4115 The Nature of Political Ecology

SCOTCAT Credits:	30	SCQF level 10	Semester	2
Academic year:	2020-2021			
Availability restrictions:	This module will be	This module will be offered on a bi-annual basis.		
Planned timetable:	To be advised			

We live in a time when human activities have profoundly altered the composition of the air we breathe, the water we drink, and the geology upon which we live. Yet, at the very moment that humanity has arguably become the most powerful geological force on Earth, anthropogenic changes threaten the very conditions that sustain us. This course offers an introduction to political ecology - the study of the relationships and interactions between political-economic structures and ecological systems - and asks what it might teach us about the current climatic and ecological crises. We begin by considering how ontological and epistemological conceptions of nature are entangled in these crises. Next, we examine how logics of capitalism, the state, race, gender, and colonialism structure the environments we inhabit. We then explore how these environments are also co-produced by the non-human world. Finally, we ask what actions must be taken to ensure just and abundant planetary futures.

Pre-requisite(s):	Before taking this module you must pass SD2001 and pass SD2002 or pass GG2011 and pass GG2012		
Learning and teaching	Weekly contact: 1 hour online lecture, 2 hours online seminar (x11 weeks).		
methods of delivery:	Scheduled learning: 55 hours	Guided independent study: 176 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
Assessment pattern.	As used by St Andrews: 100% continual assessment.		
Re-assessment pattern:	100% continual assessment.		
Module coordinator:	Dr M P Simpson		
Module teaching staff:	Dr Michael Simpson		

SD4297 Dissertation in Sustainable Development 30 **SCOTCAT Credits:** 2 SCQF level 10 Semester Academic year: 2020-2021 **Availability restrictions:** Available only to Sustainable Development Honours students. Planned timetable: To be arranged. This dissertation builds on 3000-level research methods training and will demonstrate the importance of an interdisciplinary approach to researching key questions of sustainable development. This independent research will involve the review of relevant literature, 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 approaches to scientific writing, and analysing 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:	Weekly contact : 1 away day (4 hours in St Andrews OR 8 Hours residential if possible), 4 x 2-hour skills workshops face to face online. (Those in S1 are not tallied here) up to 10 hours individual supervision, by arrangement with supervisor, face to face online or in person. 1 x 4 hours student research conference (4 hours) face to face online"		
	Scheduled learning: 30 hours Guided independent study: 270 hours		
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 5%, Coursework = 95%		
Assessment pattern:	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 T A Stojanovic		
Module teaching staff:	Team taught		