Sustainable Geography (SG) modules

SG3201 Single Honours Research Design and Methodology Training (60)						
	SCOTCAT Credits:	60 SCQF Level 9 Semester: 2				
	Academic year:	2015/6 & 2016/7 Not available to General Degree Students. To be arranged.				
	Availability restrictions:					
	Planned timetable:					

This module occupies a central place in our field-based research-orientated degree. It prepares students to undertake their independent research dissertation and develops transferable professional skills useful beyond graduation. Students learn about research design and the collection of original empirical data through engagement with a series of problem-based issues in geography and sustainable development. Themes covered include: training in quantitative, qualitative, and physical research methods; ethics of research; statistical techniques; cartography; and GIS (Geographical Information Systems). There is opportunity for streaming and choice amongst units covering these themes. Skills and techniques learned are applied during a residential field course where students will design and execute an original empirical research project with a staff mentor. The module concludes with students producing an independent research proposal for their Senior Honours dissertation projects.

Programme module type:	Compulsory core for Single Honours Geography and one of SG3201 - SG3204 is compulsory for Sustainable Development			
Pre-requisite(s):	• • • • • • • • • • • • • • • • • • • •		SG3202, SG3203, SG3204, GG3201, SD3201	
Required for:	GG4201, SG4221, SG4222, SG4223, SG4224, SG4228, GG4298, SD4299, GG4301			
Learning and teaching methods and delivery:				
	Scheduled learning: 150 hours Guided independent study: 450 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr D McCollum			
Lecturer(s)/Tutor(s):	Team taught			

SG3202 Joint Honours Research Design and Methodology Training (30) SCOTCAT Credits: 30 SCQF Level 9 Semester: 2 Academic year: 2015/6 & 2016/7 Availability restrictions: Not available to General Degree Students. Planned timetable: To be arranged.

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

Programme module type:	Compulsory core for Joint Honours Geography			
	One of SG3201 - SG3204 is compulsory for Sustainable Development			
Pre-requisite(s):			SG3201, SG3203, SG3204, GG3202, SD3202	
Required for:	SG4221, SG4222, SG4223, SG4224, SG4228, GG4297, GG4301			
Learning and teaching methods and delivery:	Weekly contact : Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 7.5 weeks).			
	Scheduled learning: 75 hours Guided independent study: 225 h			dent study: 225 hours
Assessment pattern:	As defined by QAA:			
	Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100			%, Coursework = 100%
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr D McCollum			
Lecturer(s)/Tutor(s):	Team taught			

SG3203 Research Design and Methodology Training (50) SCOTCAT Credits: 50 SCQF Level 9 Semester: 2 Academic year: 2015/6 & 2016/7 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 dissertation and develops transferable professional skills useful beyond graduation. Students will learn about research design and the collection of original empirical geographic data through engagement with a series of problem-based geographical issues. Themes covered include: epistemology; ethics of research; statistics; cartography; GIS; and quantitative, qualitative and physical research methods. Students are also required to attend an residential field course. There is opportunity for streaming and choice amongst units covering these themes, and students will need to make an informed choice, with the help of their advisor, to select from the units shared with the larger 60-credit GG3201. The module concludes with students producing an independent research proposal for their Senior Honours dissertation research.

Programme module type:	Compulsory core for Geography with Persian, Geography with Social Anthropology, Geography with Spanish One of SG3201 - SG3204 is compulsory for Sustainable Development			
Pre-requisite(s):	Passes at grade 11 or better in GG2011 and GG2012 or SD2001 and SD2002 Anti-requisite(s): SG3201, SG3202, SG3204, GG3203, SD3203			SG3204, GG3203,
Required for:	GG4201, SG4221, SG4222, SG4223, SG4224, SG4228,GG4298, SD4299, GG4301			
Learning and teaching methods and delivery:	Weekly contact: aries according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 8.5 weeks), and a 1-week (40 hour) field class.			
	Scheduled learning: 125 hours Guided independent study: 375 hours			dent study: 375 hours
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 100%			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr D McCollum			
Lecturer(s)/Tutor(s):	Team taught			

SG3204 Method, Field, Data: Design and Methodology Research Training (40) SCOTCAT Credits: 40 SCQF Level 9 Semester: 2 Academic year: 2015/6 & 2016/7 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.

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 week-long research-based fieldclass organised around the design and implementation of a specific research project. The module provides fundamental training for the independent Senior Honours dissertation project.

Programme module type:	One of SG3201 - SG3204 is compulsory (Core) for Sustainable Development			
Pre-requisite(s):	Passes at grade 11 or better in GG2011 and GG2012 or SD2001 and SD2002 Anti-requisite(s)		SG3201, SG3202, SG3203, SD3204	
Required for:	SG4221, SG4222, SG4223, SG4224, SG4228, GG4298, SD4299, GG4301			
Learning and teaching methods and delivery:	Weekly contact: Varies according to the combination of elements (module units) chosen by the student. Average of 10 hours (x 8 weeks) plus a fieldclass.			
	Scheduled learning: 104 hours Guided inde		endent study: 296 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%.			
Re-Assessment pattern:	No Re-Assessment available			
Module Co-ordinator:	Dr D McCollum			
Lecturer(s)/Tutor(s):	Team taught			

SG3229 Environmental Management in Scotland SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2016/7 Availability restrictions: Offered on a two-year cycle. Planned timetable: To be arranged.

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

Programme module type:	Optional for all degrees involving Geography or Sustainable Development		
Pre-requisite(s):	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)		
Learning and teaching methods and delivery:	Weekly contact : 1 x 2-hour lecture (x 10 weeks) + 2 x 1-hour feedback/revision sessions and a 1-day (8 hour) field excursion.		
	Scheduled learning: 30 hours Guided independent study: 170 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%		
	As used by St Andrews: 2-hour Written Examination = 60%, Practical Examination = 20%, Cour = 20%		
Re-Assessment pattern:	2-hour Written Examination = 100%		
Module Co-ordinator:	Dr C R Warren		
Lecturer(s)/Tutor(s):	Dr C R Warran		

SG3235 Science, Society and Natural Resource Management SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2015/6 Availability restrictions: Offered on a two-year cycle. Planned timetable: 4.00 pm - 6.00 pm Thu

This module examines the role of natural science in understanding the relationship between people and their environment. Much environmental management relies on 'evidence-based' decision-making, perhaps giving the impression that this evidence provides all the answers. This module illustrates how the 'answers' provided by natural science often depend on the interests of the questioner, and explores conflict and debate over issues of natural resource conservation and restoration between scientific, policy and lobby groups. Using a range of Scottish and international case studies – peatlands, woodlands, climate change, and heritage values – the module examines how scientific research is used and translated into practice.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)			
Learning and teaching methods and delivery:	Weekly contact : 1 x 1-hour lecture and 1 x 1-hour seminar (x 10 weeks) + 1 x 1-hour essay preparation session, 1 x 1-hour revision session, 4 x 1-hour office hours over the semester.			
	Scheduled learning: 22 hours Guided independent study: 178 hours			
Assessment pattern:	Assessment pattern: As defined by QAA:			
	Written Examinations = 60%, Practica	al Examinations = 0%, Coursework = 40%		
	As used by St Andrews:			
	2-hour Written Examination = 60%, Coursework = 40% (of which 25% and 15% = group presentation)			
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator: Dr A Davies				
Lecturer(s)/Tutor(s):	Dr A Davies			

SG3272 Long-term Perspectives on Sustainability

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SCOTCAT Credits:	20	SCQF Level 9	Semester:	1	
Academic year:	2016/7				
Availability restrictions:	Offered on a two-year cycle.				
Planned timetable:	To be arranged.				

This module examines how long-term perspectives on human-environment interactions can inform modern understandings of sustainability. Although sustainability is a modern concern, many of its problems are very similar to those faced by societies in the past: climatic change, resource degradation, extreme events, conflict and natural hazards. This module illustrates how we can investigate past human-environment interactions through careful consideration of palaeoenvironmental data, and then consider how this can be used to understand how past societies coped, or failed to cope, with a range of problems. This idea will be illustrated with a range of case studies across the North Atlantic islands and the Pacific islands.

Programme module type:	Optional for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes at grade 11 or better in (GG2011 and GG2012) or (SD2001 and SD2002)			
Learning and teaching methods and delivery:	Weekly contact: 1-hour lecture, 1-hour seminar (x 10 weeks), 6 office hours over semester.			
	Scheduled learning: 26 hours Guided independent study: 174 hours			
Assessment pattern:	As defined by QAA:			
	Written Examinations = 60%, Practica	al Examinations = 0%, Coursework = 40%		
	As used by St Andrews:			
	2-hour Written Examination = 60%, C	Coursework = 40%		
Re-Assessment pattern:	2-hour Written Examination = 100%			
Module Co-ordinator:	Dr R Streeter			
Lecturer(s)/Tutor(s):	Dr R Streeter			

SG4221 Review Essay

SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
Academic year:	2015/6 & 2016/7			
Availability restrictions:	Core - available every year			
Planned timetable:	4.00 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.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development		
Pre-requisite(s):	Passes in one of SG3201, SG3202, SG3203, SG3204, GG3201 - GG3204, SD3201 - SD3204		
Learning and teaching methods and delivery:	Weekly contact: Introductory lecture and seminar (2 hours) followed by guided independent study (one-to-one supervision)		
	Scheduled learning: 2 hours Guided independent study: 198 hours		
Assessment pattern:	As defined by QAA:		
	Written Examinations = 0%, Practical	Examinations = 0%, Coursework = 100%	
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Review Essay = 100%		
Module Co-ordinator:	Dr L Finny		
Lecturer(s)/Tutor(s):	Team taught		

SG4222 Advanced Qualitative Analysis SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2015/6 & 2016/7 Planned timetable: 11.00 am - 1.00 pm Thu

This module offers advanced training in methods of qualitative analysis that facilitate dissertation work and develop transferable skills for future careers. Learning is project/problem-based, and students gain practical experience of working with a range of qualitative data (e.g. archives, visual and textual documents and interview transcripts) using a range of analytical approaches (e.g. discourse analysis, deconstruction, grounded theory and computer-assisted qualitative analysis). Research data are drawn from a range of areas within geography and sustainable development. Techniques, themes and materials will vary according to staff availability.

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Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes in one of SG3201, SG3202, SG3203, SG3204, GG3201 - GG3204, SD3201 - SD3204			
Learning and teaching methods and delivery:	Weekly contact: 2-hour lecture (x 4 weeks), 2-hour seminar (x2 weeks), 2-hour practical (x3 weeks)			
	Scheduled learning: 18 hours Guided independent study: 182 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews:			
	Coursework = 100%			
Re-Assessment pattern:	Coursework project = 100%			
Module Co-ordinator:	Dr M Sothern			
Lecturer(s)/Tutor(s):	Team taught			

SG4223 Advanced Quantitative Analysis SCOTCAT Credits: 20 SCQF Level 10 Semester: 1 Academic year: 2015/6 & 2016/7 Planned timetable: 2.00 pm - 4.00 pm Tue and Thu

Students taking this module will learn some of the core research skills necessary to be a professional quantitative social science researcher and then to carry out a typical consulting project. It will allow them to explore a substantive policy issue, carry out their own quantitative research and then make recommendations based on these findings. They will be presented with a 'real world' scenario and be expected to take on the role of a researcher who is advising policy makers; in simulations of various policy forums, they will then learn how to defend their recommendations and advice. They will first be taught the relevant quantitative research skills and introduced to potentially useful research resources. They will then be expected to construct their own research strategy, carry out the necessary research and present this in various formats, working independently of the teaching staff.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development			
Pre-requisite(s):	Passes in one of GG3201, GG3202, GG3203, SD3201 - SD3204, SG3201 - SG3204	Anti-requisite(s):	GG4223, SD4223	
Learning and teaching methods and delivery:	Weekly contact : 2-hour lectures, 2-hour seminars, 1-hour practical classes each week for 7 weeks, and occasional tutorials.			
	Scheduled learning: 38 hours	Guided indepe	endent study: 162 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 Co-ordinator:	Dr A Marshall			
Lecturer(s)/Tutor(s):	Team taught			

SG4224 Advanced Topics in Physical Sciences					
	SCOTCAT Credits:	20	SCQF Level 10	Semester:	1
	Academic year:	2015/6 & 2016/7			
	Planned timetable:	11.00 am - 1.00 pm Tue and 9.00 am - 11.00 am Thu			

This module introduces students to a range of advanced and cutting edge topics in Physical Geography and other physical sciences relevant to geography and sustainable development. Three topics are offered each year that build on material explored in 3000-level Honours modules, and which expand and deepen students' practical skill set. Students choose two of the three topics. Each topic includes in-depth study of the primary literature, combined with advanced training in analytical, technical or methodological approaches, thus integrating "hands-on" applied learning with critical reading of the primary literature. The module complements and expands the learning acquired in SG3201-SG3204, and provides additional resources for the development of students' individual dissertation projects.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development		
Pre-requisite(s):	Passes in one of SG3201, SG3202, SG3203, SG3204, GG3201 - GG3204, SD3201 - SD3204	Anti-requisite(s):	GG4224, SD4224
Learning and teaching methods and delivery:	Weekly contact: 2 hour lectures (x 9 weeks) and 1 x 1-day (4 hour) field class.		
methous and delivery.	Scheduled learning: 22 hours	Guided independent study: 178 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100% As used by St Andrews: Coursework = 100%		
Re-Assessment pattern:	Coursework project = 100%		
Module Co-ordinator:	Dr R Streeter		
Lecturer(s)/Tutor(s):	Team taught		

SG4228 Advanced Topics in Geographic Information Science (GISci) SCOTCAT Credits: 20 SCQF Level 9 Semester: 1 Academic year: 2015/6 & 2016/7 Planned timetable: 10.00 am - 12.00 noon Mon and Fri, and 2.00 pm - 4.00 pm Mon and Fri

The first part of the module explores advanced GIS and spatial analysis techniques for use with geographic datasets. Students will gain theoretical and applied knowledge in order to study and describe spatial patterns in geographic data. Theoretical understanding will be emphasised through lectures and readings. Labs/practicals will be designed to provide students with hands-on experience applying theory and techniques to datasets spanning human and environmental geography using applications including crime, forestry, health, environmental change, and housing. Focus will be placed on methods for analysing spatial point patterns, spatial autocorrelation, and spatial modelling.

In the second part, students will engage in a small research project of their choosing to showcase their new advanced GIS skills. The project will allow students to use GIS and spatial analysis techniques to address a chosen problem in either of the social, physical, or environmental sciences. Students with domain knowledge in human geography, physical geography, or sustainable development will be able to tailor GIS projects to their own applications.

Programme module type:	Optional elective for all degrees involving Geography or Sustainable Development		
Pre-requisite(s):	SG3201-4 Unit 2a OR Unit 3 AND SG3201-4 Unit 6		
Learning and teaching methods and delivery:	Weekly contact: 2 hours lectures (x 9 weeks), 2-hour practical classes (x 6 weeks), 2-hour IT Lab Help sessions (x 3 weeks)		
	Scheduled learning: 36 hours	Guided independent study: 164 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews:		
	Coursework = 100%		
Re-Assessment pattern:	Coursework project = 100%		
Module Co-ordinator:	Dr J Long		
Lecturer(s)/Tutor(s):	Dr J Long, Dr U Demsar		