School of Geography & Geosciences

Head of School	Professor P J Boyle		
Degree Programmes			
Postgraduate Diploma:	Health Geography Research (<i>not available 2009/10</i>) Environmental History (<i>see School of History</i>) Managing Environmental Change (<i>not available 2009/10</i>) Sustainable Development (<i>see section 25</i>)		
M.Res.:	Health Geography (not available 2009/10)		
M.Litt.:	Environmental History (see School of History)		
M.Phil.:	Environmental History (see School of History)		
M.Sc.:	Managing Environmental Change (not available 2009/10) Sustainable Development (see section 25)		

Programme Requirements

Health Geography/Health Geography Research

Postgraduate Diploma:	(120 credits): 85 credits from GE5001, ID5011, SS5101, SS5102, SS5103 and SS5104 and 35 credits from GE5010, MO5023 and/ other modules as approved by the course co-ordinator	
M.Res.:	120 credits, as for the Postgraduate Diploma, plus a dissertation (GE5008) of not more than 15,000 words (60 credits)	

Managing Environmental Change

(Taught in partnership with the Department of Geography, University of Dundee)

Postgraduate Diploma:	(120 credits): 40 credits from GG5101, ID5005, GG5109 and either GG5105 or GG5106 (depending on availability), 15 or 20 credits from ID5010, ID5011 or ID5012, 30 credits from GG5110, and the remaining 30 or 35 credits from GE5010, GG5103, GG5104, SS5103-4, and 4000 level modules (up to 30 credits with permission of the relevant Head of School). Modules GG5105, GG5106 and GG5109 are based in Dundee, all others are based in St Andrews.
M.Sc.:	120 credits, as for the Postgraduate Diploma, plus a dissertation (60

120 credits, as for the Postgraduate Diploma, plus a dissertation (60 credits, GG5111) of not more than 10,000 words

Modules

GE5001 Health Inequalities

Credits:	10	Semester:	1
Availability:	Not available 2009-10		
Programme:	Compulsory core module for Health Geo	ography Postgradu	ate Taught Programme.

Description: The module will define health, disease and illness; describe the epidemiological transition and its relevance in different geographical settings; demonstrate and explain the social, demographic and ethnic inequalities in health outcomes; consider the geographical variations in health inequalities both between and within nations; and critically examine the various philosophical approaches used to understand the geography of health inequalities. Techniques will include deprivation indexes; mapping of health data; use of the census and major government surveys.

Class Hour:	To be arranged.		
Teaching:	One lecture and one seminar/practical.		
Assessment:	Continuous Assessment = 50%, 1 Hour Examination = 50%		
GE5002 Health Care Provision and Utilisation			
Credits:	10	Semester:	2
Availability:	Not available 2009-10		
Programme:	Compulsory core module for Health Ge	ography Postgradu	ate Taught Programme.

Description: Topics covered include international perspectives on health care; allocation of resources; accessibility to services; GIS and mapping of health care; models of location and allocation in health care; spatial differences in service utilisation and their social effects; qualitative and ethnographic approaches to health care systems. The course will include both lectures and practical components.

Class Hour:	To be arranged.
Teaching:	One lecture and one seminar/practical
Assessment:	Continuous Assessment = 100%

GE5006 Social Survey Methods in Health Research

Credits:	15	Semester:	2	
Availability:	Not available 2009-10			
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Programme: Compulsory core module for Health Geography Postgraduate Taught Programme.

Description: This module takes students through the various stages of planning and conducting a questionnaire survey in the context of health research. Topics covered include the use of established social and health measures, designing and administering a questionnaire, sampling methods, conducting interviews and creating a usable database. Students are expected to devise a detailed research proposal and present it in written form. The module is inter-disciplinary in emphasis and deliberately encourages students to think outside their own discipline.

Class Hour:	2.00 – 4.00 pm Friday
Teaching:	One lecture and one practical.
Assessment:	Continuous Assessment = 100%

GE5008 Dissertation in Health Geography 60

Credits:

Not available 2009-10 Availability:

Programme: Compulsory module for Health Geography M.Res. Postgraduate Programme.

Students choose a topic in the field of health geography on which to conduct independent Description: research. Each dissertation will be supervised by a member of the teaching staff who will provide advice throughout the research process. Research will be conducted over the summer after the end of the taught modules and the completed dissertation of no more than 15,000 words must be submitted before the end of the course.

Semester:

summer vacation

Class Hour:	To be arranged with supervisor.
Teaching:	Individual supervision.
Assessment:	Continuous Assessment = 100%

GE5010 Health and Environment

Credits:	10	Semester:	1
Availability:	Not available 2009-10		
Programme:	Compulsory module for M.Sc. in Mana	ging Environment	al Change.
	Optional module for Postgraduate T Science and the M.Litt. in Environment	0 0	es in Health and/or Environmental

Description: This module examines the relationships between the physical environment and human health. The module will compare natural and anthropogenic environments and take its examples from air pollution, water resources, volcanoes & earthquakes, mining activities, agriculture and the built environment. Particular emphasis will be placed on the causes of adverse health effects and their mitigation. The effects on health of global climate change will also be examined.

Class Hour:	To be arranged.	
Teaching:	20 hours of seminars over 3 weeks.	
Assessment:	Continuous Assessment = 50%, 2 Hour	Examination = 50%
GE5012 The Geography of HIV/AIDS (not available 2009/10)		
Credits:	10	Semester: 2
Availability:	Not available 2009-10	
Programme:	Optional module for Health Geography Environmental History.	y Postgraduate Taught Programme and the M.Litt. in

Description: This module addresses the uneven global geography of the HIV/AIDS pandemic and its concentration in Africa. It examines why social scientific, not just biomedical, research is vital and explores the regionally specific dimensions of the virus's rapid spread in this context. The module also examines the social, political and economic implications of HIV/AIDS for Africa's development. The course concludes by looking toward future local and global initiatives that might help reduce transmission and ease the human suffering caused by HIV/AIDS.

Class Hour: To be arranged.

Teaching: Two lectures and/or seminars.

Assessment: Continuous Assessment = 50%, 2 Hour Examination = 50%

GE5017 Spatial Analysis of Health Data

Credits:	10	Semester	2
Availability:	Not available 2009-10		
Prerequisite:	SS5104 or equivalent Statistics cour	rse	
Programme:	Optional module for Health Geograp	phy Postgraduate T	aught Programme
Description:	This module is intended to equip st	udents with the abi	lity to understand

Description: This module is intended to equip students with the ability to understand and apply techniques of analysis used extensively in health geography. It focuses on techniques such as cluster detection, longitudinal analysis and logit modelling, with practical work on real data in addition to instruction on the basis of techniques studied and on health geography examples.

Class Hour:	10.00 am – 12.00 noon Thursday.
Teaching:	One lecture and one practical fortnightly
Assessment	Continuous Assessment = 100%

GE5051 Environmental Management in Scotland

Credits:	20	Semester:	1
Availability:	Not available 2009-10		
Prerequisite:	Available only to Students admitted to t	he M.Litt. in Envi	ronmental History.
Programme(s):	Optional module for Environmental His	tory - Postgraduat	e Taught Programme.
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Description: This module focuses on current environmental management issues in Scotland. It provides, firstly, a presentation of the fundamental elements of the various systems of land and resource management (e.g. forestry, agriculture & crofting, wildlife, freshwater resources, conservation), and secondly, examples of the ways in which these systems interact. Throughout, the module aims to engender a holistic understanding of environmental management, in contrast to the sectoral approach traditionally employed by central and local government. The ultimate aim is to leave students with an informed conceptual framework for evaluating the merits of management proposals, with their attendant implications for environmental change and economic development. A particular focus, employing topical case studies and a field visit, will be the conflicts that are increasingly arising as interest groups with contrasting philosophies & value systems compete for the finite resources of Scotland's wild places.

Class Hour: To be arranged.

Teaching: Two 1 hour lectures weekly, and a weekend field excursion.

Assessment: Continuous Assessment = 100%

GG5101 Environmental Change

Credits:	10	Semester: 1

Programme(s): Compulsory module for the Managing Environmental Change Taught Programme

Description: This module places special emphasis on the interactions between the major components of the Earth system, notably lithosphere, atmosphere, hydrosphere and biosphere, and their influence on the rates of change. Issues such as carbon sources and sinks in relation to "carbon taxation" will be highlighted. The Scottish context of global change will also be considered.

Class Hour: To be arranged.

Teaching: 24 hours of lectures and seminars plus field trip and site visits.

Assessment: Continuous Assessment = 50%, 1 Hour, open book review essay Examination = 50%

GG5102 Environmental Management and Policy

Credits:	10			Semester:	2		
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Programme(s): Compulsory core module for the Managing Environmental Change Taught Programme

Description: The first part of this module deals with current thinking in environmental management, environmental ethics and values, environmental legislation and planning. The module then moves on to case studies illustrating how theoretical ideas apply in practical contexts, egs. waste management, conservation and protected areas policies, flood management, environmental impacts of commercial agriculture, and Scottish land reform and access legislation.

CC5102 Data continue and analysis 1. Coophysics and Demote Sensing		
Assessment:	Continuous Assessment = 100%	
Teaching:	16 hours of lectures and seminars.	
Class Hour:	To be arranged.	

GG5103 Data capture and analysis 1: Geophysics and Remote Sensing

Credits:	10	Semester:	1
Availability:	Not available 2009-10		
	Commulating module for the Managing E	nying an tol Cha	n an Tau

Programme(s): Compulsory module for the Managing Environmental Change Taught Programme

Description: The module begins with field methods of survey, notably geophysical site surveying using gravity, magnetic, electric, electromagnetic, and seismic techniques, as well as topographic surveying. Field sampling techniques are applied to water and sediments. Throughout emphasis is placed on methods for storing and manipulating spatial data using GIS.

Class Hour:	To be arranged.
Teaching	About16 hours of lectures and tutorials, and about 30 hours of formal practical work.
Assessment:	Continuous Assessment (Field Report on Geophysical Methods = 40% , Spatial analysis of remote sensing data 40% , poster presentation = 20%) = 100%

GG5104 Data capture and analysis 2: Laboratory methods

Credits: 10 Semester: 1

Programme(s): Compulsory module for the Managing Environmental Change Taught Programme

Description: This module provides students with practical experience in using modern analytical methods relevant to environmental geochemistry. As well as gaining hands-on experience with a range of analytical equipment the module will cover relevant methods by which data from various analytical methods may be processed and represented. The concepts of precision and errors in practical analysis will be developed, and students will gain an understanding of the requirements of health and safety at work legislation for working in laboratories as well as an appreciation of good laboratory practice.

Class Hour:	To be arranged.
Teaching:	8 hours of lectures plus 30 hours of formal practical work.
Assessment:	Continuous Assessment = 100%

GG5110 Group Project

Credits: 30 Semester: 2

Programme(s): Compulsory module for the Managing Environmental Change Taught Programme

Description: The project will be based on an environmental management problem that will involve most or all of fieldwork and site visits, sampling of material (eg soils, waters), lab analysis of materials, collection and evaluation of secondary data from a range of sources and a socio-economic study. Students will work in mini-teams addressing physical and human dimensions of the issue in the field. Each member of the group will take responsibility for one aspect of the study as well as contributing to the overall investigation.

Class Hour:	To be arranged.
Teaching:	Primarily based on meetings with project supervisor.
Assessment:	Continuous Assessment (Individual presentation = 25%, Group presentation = 25%, Individual
written report = 259	%, Group written report = 25%) = 100%

GG5111 Individual Project

10

Credits:

Credits:	60	Semester:	Summer
Programme(s):	Compulsory module for the Managing E	nvironmental Cha	nge Taught Programme

Description: The project will take the form of addressing a problem of environmental change management. It will involve gathering appropriate primary and secondary data, analysing the data, evaluating potential solutions and presenting the outcomes using a range of presentational methods. Two types of individual project are possible. 1. Students aiming for careers outwith academia will be encouraged to base their project within another organisation where they may have an opportunity for placement. 2. Students aiming to continue in environmental research may chose a project based in the field and/or in the lab and remain within the university to complete the work.

ID5005 Enterprise, Creativity and Innovation (10)		
Assessment:	Continuous Assessment = 100%	
Teaching:	Primarily based on meetings with project supervisor.	
Class Hour:	To be arranged.	

Programme(s): Optional module for Managing Environmental Change Postgraduate Taught Programme.

Optionally available to all Postgraduate Taught Programmes, subject to approval of Course Director/Coordinator within individual Schools.

Semester:

1

Description: In this module students will acquire a critical understanding of the concepts and theories that help to understand enterprise and the processes of entrepreneurship and leadership. Through these two elements students will enhance their ability to generate ideas through creative thinking and cognitive-mapping as well as understand the significance and protection of intellectual property rights. This will enable them to better instigate, facilitate and practice in a rigorous approach to entrepreneurship and executive creativity. Teaching media will include formal lectures, case study analysis, team-based workgroups and visiting speakers.

Class Hour:	2.00 – 5.00 pm Wednesday.
Teaching:	One lecture and one seminar per week over 7 weeks.
Assessment:	Continuous Assessment = 100%

ID5010 Geographic Information Systems for Environmental Management

Credits:	15	Semester:	1
Prerequisite:	A basic ability in computer skills (Basic through SALTIRE if not demonstrated	word processing,	spread sheet analysis) gained
Anti-requisite:	GE5005, ID5011, ID5012		
Programme(s):	Optional module for Environmental Biol Management and Environmental History	0.	

Description: This module provides an introduction to Geographic Information systems and their use in environmental problem solving. The module will be taught through a series of lectures, tutorials, laboratory classes and individual projects. The module will be assessed through class exercises and the final, short individual project. Students will be introduced to methods of acquiring, storing, analysing and displaying (2D and 3D) spatial digital data using the ArcGIS data package. An introduction to data manipulation and statistical techniques on a variety of environmental examples will be given. The module is taught within the School of Geography & Geosciences but incorporates datasets and analysis techniques used in earth and environmental science, biology, archaeology, and mathematics.

Class Hour:	To be arranged.	
Teaching:	Lectures, practicals and occasional tutorials.	
Assessment:	Continuous Assessment = 50% , Short Project = 50%	
ID5011 Geographic Information Systems for Social Research		

Credits:	15	Semester:	1
Prerequisite:	A basic ability in computer skills (Basic through SALTIRE if not demonstrated	word processing,	spread sheet analysis) gained
Anti-requisite:	GE5005, ID5010, ID5012		
Programme(s):	Optional module for Health Geography	Research Taught H	Programme

Description: This module provides an introduction to Geographic Information systems and their use in health (and related) problem solving. The module will be taught through a series of lectures, tutorials, laboratory classes and individual projects. The module will be assessed through class exercises and the final individual project. Students will be introduced to methods of acquiring, storing, analysing and displaying (2D and 3D) spatial digital data using the ArcGIS data package. An introduction to data manipulation and statistical techniques on a variety of health examples will be given.

Class Hour:	To be arranged.
Teaching:	Lectures, practicals and occasional tutorials.
Assessment:	Continuous Assessment = 50% , Short Project = 50%

ID5012 Advanced Geographic Information Systems

Credits:	20	Semester:	1			
Prerequisite:	A basic ability in computer skills (I through SALTIRE if not demonstrated	-	processing,	spread sl	heet analysis)	gained
Anti-requisite:	GE5005, ID5010, ID5011					

Programme(s): Optional module for M Res in Environmental Biology Taught Postgraduate Programmes.

Description: This module provides an advanced training in Geographic Information Systems (GIS) and their use in environmental problem solving. The module will be taught through a series of lectures, tutorials, laboratory classes with emphasis on a final independent GIS project. The module will begin with an introduction to data storage and manipulation, basic analysis of 2D and 3D spatial digital data and methods of display and will conclude with database design and more advanced data analysis using ArcGIS. Assessment will be based on the class exercises and the final project. The module is taught within the School of Geography & Geosciences but incorporates datasets and analysis techniques used in earth science, biology, economics and management and mathematics.

Class Hour:	To be arranged.
Teaching:	Lectures, practicals and occasional tutorials.
Assessment:	Continuous Assessment = 40% , Individual Project = 60%

SS5101 Being a Social Scientist: Skills, Processes and Outcomes

Credits: 15 Semester: 1

Programme(s): Compulsory module for the M.Res. in Health Geography

Description: This module focuses on developing students' specific research thinking and writing skills in a practically based way. Thus, the module will address the nature of being a research social scientist including exploring some of the ethical issues involved. The module will also consider selecting suitable research questions and framing these as appropriate for Masters and Ph.D. dissertations.

Class Hour:	To be arranged
Teaching:	3 hour lecture, fortnightly
Assessment:	Continuous Assessment = 100%

SS5102 Philosophy and Methodology of the Social Sciences

Credits:	15	Semester:	1
Programme(s):	Compulsory module for M.Res. in Health	h Geography	

Description: Beginning with a discussion of the evolution of the social sciences, this module addresses central philosophical questions of social science including discussion of epistemological and methodological aspects of positivism and interpretivism.

Class Hour; To be arranged.

Teaching: Details to follow.

Assessment: Continuous Assessment = 100%

SS5103 Qualitative Methods in Social Research

Credits: 15	Semester:	2
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Programme(s) Compulsory module for M.Res. in Health Geography

Description: This module offers both a theoretical and practical introduction to qualitative research. The diversity of the approaches to qualitative research will be addressed but the focus of the module is primarily practical necessitating the active participation of students.

Class Hour: To be arranged

Teaching: 2 hour, weekly

Assessment: Continuous Assessment = 100%

SS5104 Quantitative Research in Social Science

Credits:	15	Semester:	1
Programme(s)	Compulsory module for M.Res. in Hea	lth Geography	

Description: This module will cover basic concepts and approaches to quantitative research in the social sciences in order to provide students with the basic quantitative tools for collecting, organising and analysing data.

Class Hour:	To be arranged
Teaching:	Details to follow
Assessment:	Continuous Assessment = 100%