

# MODULE DETAILS

The following module details are intended to help you with module selection. As well as the details for each module, there is a list of prerequisites which will help in planning which modules you need to take in order to be able to select the optional modules you wish later on.

Note that the module details and availability can change because of changes in staffing. It is always best to check the latest information on the SSiD webpage

[www.shef.ac.uk/ssid/course](http://www.shef.ac.uk/ssid/course)

To obtain further information about a particular module you should contact the module convenor (the convenor is indicated in **bold** in the list of module teaching staff).








## FIELDCLASS COSTS

Where a module is core for your degree, it is normal for all costs associated with fieldclass attendance to be covered by the tuition fee. For other students, the cost of fieldclass attendance is indicated, but all costs remain subject to confirmation. **Please note that information on fieldclass provision and associated costs applies to the academic year 2014/15 only.**

## USING THE SKILLS ICONS

Alongside the details for each module you will notice a set of skills icons. The purpose of these icons is to highlight the top three skills that you will develop within each module. The top three skills chosen are a guideline only, with the aim of encouraging you to actively reflect on the full range of skills gained during your learning.

Each icon represents a different skills category, which is comprised of several specific skills (see the key below). The 'top three' skills for each module are based on a combination of factors: to what extent the skill is explicitly taught in module content, to what extent the skill is gained through independent learning, to what extent the skill is particularly novel or transferable to employment. More detail about skills development is available in the Careers & Employability Booklet.

Icon	Skill Category	Specific Skills/ Attributes Gained
	Organisation	Prioritising & planning, decision making, self-management
	Communication	Written communication, oral presentation, working with others, production of non-essay type materials.
	Numeracy & Information Technology	Information retrieval, numeracy, statistical analysis, computer literacy, use of computer software
	Intellectual & Enterprising	Analysing & problem solving, developing a reasoned argument, creative & critical thinking
	Research	Quantitative & qualitative research methods, ethical consideration, risk assessment methods.
	Awareness & Attitude to Work	Commercial/business awareness, political & cultural sensitivity, personal reflection & evaluation, networking
	Geography-Specific	Spatial analysis, application of cross-disciplinary understandings, global awareness

## IPS101 Achieve More – The State of Sheffield, Global Perspectives on Local Issues

<b>Level</b>	1
<b>Credits</b>	0
<b>Availability</b>	Core for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning**
<b>Semester</b>	Academic Year
<b>Prerequisites</b>	None

### Description

The State of Sheffield is an interdisciplinary challenge that is attended by all Level-1 students in the Faculty of Social Sciences, commencing in 2014/15. Its aim is to broaden your thinking and skills development outside of individual subject areas, and increase employability prospects.

**The 'Challenge Week' will take place in Timetable Week 19 (2-6 February 2015).** You will work in groups of 6-8 from across a range of departments and a Facilitator will provide support and guidance during the week.

Each group will select a project topic from one of the five overarching themes such as Politics, Migration, Inequality, Physical World and Digital World. The projects are primarily research-based, so you will be building expertise in areas that will help with your studies.

Over the course of Week 15, you will undertake activities which include:


- Researching your chosen topic
- Attending mini-lectures and training sessions
- Producing an artefact (e.g. poster, map, video)
- Presenting your findings to other groups and lecturers

The Challenge Week will conclude with a showcase of artefacts and a prize-giving ceremony.

Although the challenge bears no credits, successful completion is compulsory, and all students are required to pass the challenge to progress to Level 2. **Attendance and participation during the challenge week is therefore essential.**

For more information see:

[www.sheffield.ac.uk/faculty/social-sciences/learningandteaching/state-of-sheffield](http://www.sheffield.ac.uk/faculty/social-sciences/learningandteaching/state-of-sheffield)

<b>Delivery</b>	Lectures (5 hrs); Tutorials (5 hrs);	<b>Skills</b> 
<b>Methods</b>	Independent Group Work (25 hrs)	
<b>Learning Hours</b>	Scheduled: 10 hrs; Independent: 25 hrs	
<b>Assessment</b>	Group Presentation at the end of the Challenge Week	
<b>Departmental Contacts</b>	BSc Geography and Environmental Science: <b>Dr Felix Ng</b> BA Geography: <b>Prof Jenny Pickerill</b>	

\*\* IPS101 for BA Geography & Planning students is managed by the Department of Town and Regional Planning

## GEO101 Physical Systems at the Global Scale

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BSc Geography; Environmental Science Approved for BA Geography; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	None

### Description

This course is intended to provide an introduction to the general principles of physical geography for students with diverse backgrounds. Using a systems-based approach to physical geography, four environmental systems will be examined: geosphere, atmosphere, hydrosphere, and cryosphere.

The final part of the course will consider the interactions between physical systems and also the causes and consequences of systems change, such as climatic change, over time and space.

### Aims

- To illustrate and assess the value of a systems approach in physical geography.
- To introduce the fundamental elements of four key physical systems.
- To examine the dynamics and interactions of these systems at the global scale.




### Learning outcomes

By the end of the module a student will be able demonstrate:

- An appreciation of the value of a systems approach in Physical Geography.
- An understanding of the key elements of the Earth's physical system at the global scale and some of the interactions between them.

### Outline Contents

- Physical systems properties (2 lectures) – basics and justification of the systems approach; nature and types of system; physical systems links.
- Geosphere (4 lectures) – global rock cycle; plate tectonics; geomorphic process systems; landforms and their development.
- Atmosphere and Hydrosphere (6 lectures) – global energy system; atmospheric circulation; global water balance and precipitation regimes; oceanic circulation; interaction with the geosphere.
- Cryosphere (5 lectures) – glaciers and ice sheets; contemporary ice masses and their system links; cryospheric sensitivity and feedback.
- Systems interaction, evolution and change (2 lectures) – external forcing of the earth system; earth system change; the last 2 million years; future earth system change; consequences of climatic change.

<b>Delivery Methods</b>	Lectures (20 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Press, F., Siever, R., Grotzinger, J. and Jordan, T.H. (2004) <i>Understanding Earth</i> (4th edition) Smithson, P., Addison, K. and Atkinson, K. (2008) <i>Fundamentals of the Physical Environment</i> (4th edition)	
<b>Assessment</b>	Examination: 100%	
<b>Staffing</b>	<b>Prof Edward Hanna</b> , Dr Andrew McGonigle, Dr Felix Ng	

## GEO103 Region, Nation and World

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography; BA Geography & Planning Approved for BSc Geography; Environmental Science
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

### Description

The first part of this module describes the main elements and key issues involved in the global economic system. In the second part the uneven development process within the global economy is examined. In the third part it is shown how economic activities at the local level are similarly moulded by global influences.

### Aims

- To introduce the global pattern of economic interdependence and the inequalities present within it, showing how this pattern changes over time.
- To examine spatial interdependencies within the themes of production, consumption and labour.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- A critical understanding of the globalisation process and the geographical inequalities it has given rise to.
- The ability to illustrate the nature of the development process in different regions of the world.
- The ability to interpret and critically appraise development policy.

### Outline Contents

- Global capitalism: Capitalism and globalisation; uneven development; trade and the global economy; trade blocs and the geography of alliances; trans-national corporations (TNCs); international division of labour; global consumption; technology and time-space compression.
- Uneven development within capitalism: Growth and divergence; empirical evidence and theoretical explanations; structural adjustment; critique of international development efforts; changing economic conditions in developed countries; development policies.
- The local context: Labour processes under Fordism; labour processes under post-Fordism; local spatial divisions of labour; embeddedness of local firms; community entrepreneurship and the social economy; industrial clusters.

<b>Delivery Methods</b>	Lectures (20 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Dicken, P. (2010). <i>Global Shift</i> Knox, P., Agnew, J. et al (2008) <i>The Geography of the World Economy</i>	
<b>Assessment</b>	Examination: 100%	
<b>Staffing</b>	<b>Dr Desiree Fields</b> , Dr Seth Schindler	

## GEO108 Earth's Changing Surface

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BSc Geography; Environmental Science Approved for BA Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

### Description

Geomorphology is the science that investigates the landforms of the earth. All landforms have a beginning, a period of development and an end. When viewed in the framework of earth history they are essentially events in space and time that change during the course of their existence. This module introduces the fundamental principles of geomorphology considering issues such as temporal and spatial scale, equilibrium and interaction between different landscape processes and components.




### Aims

- To introduce the key principles of modern geomorphology.
- To investigate the linkages between sediment transport processes and landforms.
- To describe the characteristic temporal and spatial scales of landform development.
- To illustrate long-term landscape development.

### Learning outcomes

By the end of the module a student will be able to demonstrate an understanding of:

- How the study of geomorphology has progressed.
- How landforms evolve and distinctive landscapes are produced.
- How dominant geomorphic processes vary according to climate, vegetation and relief.
- The intermittency of many geomorphic processes.
- How the magnitude of a geomorphological event is often related to its frequency.

<b>Delivery Methods</b>	Lectures (20 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	There is no single supporting text for this course	
<b>Assessment</b>	Examination: 100%	
<b>Staffing</b>	<b>Dr Robert Bryant</b> , Dr Darrel Swift, Dr Andrew Dean	

## GEO112 Introducing Social and Cultural Geographies

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography; BA Geography & Planning Approved for BSc Geography; Environmental Science
<b>Semester</b>	Autumn
<b>Prerequisites</b>	None

### Description

This module provides an introduction to social and cultural geography, focusing on a range of key concepts, current debates and contemporary issues. The module challenges notions of society as structure and pattern and structure as artefacts and introduces a socio-cultural understanding of human experience and relationships. Drawing examples from around the world at a variety of geographical scales, the module explores the contested nature of our social and spatial world and conflicting conceptions of our place in nature/culture.

### Aims

- To provide a critical introduction to social and cultural geography.
- To illustrate the contested nature of our social world and conflicting conceptions of our place in nature.
- To introduce a socio-cultural perspective on human experience and relationships.




### Learning Outcomes

By the end of the module, a student will be able to:

- Identify key concepts and current debates in social and cultural geography.
- Demonstrate a critical understanding of these concepts and debates.
- Illustrate the contested nature of our social world and our place in nature.

### Outline Contents

- Introductory lecture (1 lecture).
- Making social identities geographically (5 lectures).
- Cultural Geographies (6 lectures).
- Social and Cultural Geographies of Urban Experience (6 lectures).
- Conclusion, exam preparation, revision, module evaluation (1 lecture).

<b>Delivery Methods</b>	Lectures (20 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Cloke, P., Crang, P. & Goodwin, M. (eds) (2005) <i>Introducing Human Geographies</i> Holloway, L. and Hubbard, P. (2001) <i>People and Place: The Extraordinary Geographies of Everyday Life</i> Johnston, R.J. et al (eds) (2000) <i>The Dictionary of Human Geography</i> Horton, J. and Krafty P. (2014) <i>Cultural Geographies</i>	
<b>Assessment</b>	Examination: 100%	
<b>Staffing</b>	<b>Dr Megan Blake</b> , Dr Eric Olund, Prof Peter Jackson	

## GEO150 Practical Methods for Physical Geography

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BSc Geography Approved for BA Geography; Environmental Science; BA Geography and Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

### Description

This module provides basic training in several key laboratory and field methods. This is provided via a short series of introductory lectures and then by a series of integrated field work days and laboratory practical sessions. The former component of the course aims to demonstrate the importance of laboratory and field experimentation within modern physical geography enquiry. The latter component aims to provide hands-on experience of data collection, synthesis and presentation within the context of geomorphology.

### Aims

- To emphasise the importance of laboratory and field experimentation in physical geography.
- To give basic training in key laboratory and field techniques.
- To introduce methods for the assessment of data quality and the presentation of experimental data.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- Practical skills relevant to modern physical geography laboratory and field methods.
- Written skills for the synthesis, presentation and assessment of data.

### Outline Contents

- The role of laboratory and field research in physical geography (2 lectures).
- Field and practical work briefing (3 lectures).
- Lab classes (3 x 3-hour practicals).
- Field classes (3 x 4-hour field visits).

<b>Delivery Methods</b>	Lectures (5 hrs), Practicals (9 hrs), Fieldwork (12 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 26 hrs; Independent: 74 hrs	
<b>Supporting Texts</b>	There is no single supporting text for this course	
<b>Assessment</b>	Coursework: 50% (individual report); 25% (group report); 25% (group report)	
<b>Staffing</b>	<b>Dr Gunnar Mallon</b> , Dr Andrew Dean	
<b>Additional Costs</b>	The costs of fieldclass attendance for all students will normally be covered by the tuition fee.	

## GEO151 Qualitative Methods in Human Geography

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography Approved for BSc Geography; BA Geography and Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

### Description

This module provides an introduction to the use of qualitative methodologies within human geography, and emphasises how these methodologies connect to different ways of knowing and to divergent theoretical positions. Students are introduced to the core qualitative techniques of in depth interviewing, observation and visual methodologies, and are given experience in their practice and analysis.

### Aims

- To introduce students to the core techniques used within qualitative methodologies in human geography, and to forms of qualitative analysis.
- To introduce students to the connections between qualitative research methods, ways of knowing and theoretical perspectives.




### Learning Outcomes

By the end of the module, a student will be able to:

- Demonstrate an awareness of the nature and assumptions of qualitative research in human geography.
- Demonstrate a practical knowledge of the collection of qualitative data through interviewing and observation, and of the processes of identifying and selecting visual materials.
- Gain an appreciation of analytical and interpretative procedures with regard to interview and observation data, and to visual materials.
- Utilise writing and presentation skills with respect to these data.

### Outline Contents

- Introduction to qualitative methods, its basis in particular knowledge claims and the connection to particular theoretical positions.
- An outline of the key issues relating to in depth interviewing, observation, visual methodologies.
- Students will gain basic experience in the use of these research methods by carrying out data collection, analysis and interpretation of materials collected.

<b>Delivery Methods</b>	Lectures (8 hrs), Practicals (5 hrs), Fieldwork (5 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 18 hrs; Independent: 82 hrs	
<b>Supporting Texts</b>	There is no single supporting text for this course	
<b>Assessment</b>	Coursework: 100% (workbook)	
<b>Staffing</b>	<b>Dr Eric Olund</b> , Dr Desiree Fields, Prof Richard Phillips, Dr Seth Schindler	
<b>Additional Costs</b>	There are no costs associated with fieldwork for this module.	



## GEO152 Statistical Data Analysis in Geography

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography; BSc Geography; BA Geography & Planning Approved for Environmental Science
<b>Semester</b>	Autumn
<b>Prerequisites</b>	None

### Description

The module provides an introduction to the use of quantitative data analysis in geography. Students are introduced to descriptive statistics, data distributions, commonly encountered mathematical functions, principles of hypothesis testing and inferential analysis. The course includes hands-on experience of some commonly-used statistical methods.

### Aims

- To introduce students to key concepts in statistical data analysis.
- To introduce students to descriptive statistics and exploratory data analysis.
- To introduce students to issues of sampling and inferential data analysis.
- To develop understanding of sample accuracy, and methods for estimating sample errors and confidence intervals around estimates.
- To familiarise students with a range of methods for the statistical analysis of bivariate problems.
- To develop skills in the quantification, assessment and analysis of bivariate relationships.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- An understanding of the underlying concepts of statistical analysis.
- A capacity to undertake and critically interpret sampling and inferential data analysis, including sample accuracy, sample errors and confidence intervals.
- The ability to conduct and critically interpret a range of bivariate relationship estimation methods.

### Outline Content

- Basic concepts: variables and observations, numerical versus categorical data.
- Descriptive statistics: mean, median, mode, variance/standard deviation, exploratory data analysis.
- Data distributions and sampling theory.
- Sample accuracy, sample error and confidence intervals.
- Inferential statistics and hypothesis testing.
- Assessing bivariate relationships.

<b>Delivery Methods</b>	Lectures (20 hrs); Practical classes (8 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 28 hrs; Independent: 72 hrs	
<b>Supporting Texts</b>	Field, A. <i>Discovering Statistics using SPSS</i> Rogerson, P.A. <i>Statistical Methods for Geographers</i> (2nd edition)	
<b>Assessment</b>	Examination: 100%	
<b>Staffing</b>	<b>Professor Charles Pattie</b> , Dr Gunnar Mallon	

## GEO154 Geoenvironmental Fieldwork Skills

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for Environmental Science Not available to other degree programmes
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

### Description

To introduce students to field techniques relevant to environmental research. The field course will be conducted in an area where the links between the geology, geomorphology and environmental processes can be explored.

### Aims

Students will be introduced to:

- Basic techniques used in geo-environmental field studies.
- Links between geology, geomorphology and environmental processes.
- Experimental design in environmental science.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- The ability to collect important environmental samples within an appropriate sampling framework.
- The capability to integrate field evidence with other information.
- The ability to present and interpret environmental data.
- An understanding of the interrelationships between the geology of an area and its landforms, soils and biological communities.

### Outline Contents

- Briefing for field course.
- Introduction to laboratory methods.
- Six-day field class during the Easter Vacation.
- Poster session.

<b>Delivery Methods</b>	Lectures (1 hr), Practical classes (10 hrs), Fieldwork (60 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 71 hrs; Independent: 30 hrs	
<b>Assessment</b>	Coursework: 50% (individual report); 25% (poster); 25% (field notebook)	
<b>Staffing</b>	<b>Professor Andrew Hodson</b> plus other staff to be confirmed	
<b>Additional Costs</b>	The costs associated with fieldwork for this module will be covered by the tuition fee.	

## GEO163 Information & Communication Skills for Geographers

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Academic Year
<b>Prerequisites</b>	None

### Description

The skills needed to be able to find, evaluate, summarise and critically evaluate information are all vital to success in an undergraduate degree programme, and are also key transferable skills. This module will provide training in a wide range of methods for information handling and communication. The teaching is largely in small groups, with students expected to take more responsibility for their own learning as the module progresses. Lectures provide basic tuition in skills and small group tutorials are used to develop these skills. In the second half of the course students work in groups to produce a paper on a subject of geographical interest to be presented, in both written and oral form, at an undergraduate conference.

### Aims

- Develop students' ability to produce written work in an appropriate academic style.
- Introduce students to a range of skills for the acquisition, analysis and presentation of information from bibliographic sources.




### Learning Outcomes

By the end of the unit, a candidate will be able to demonstrate:

- An understanding of what constitutes plagiarism and knowledge of how to avoid unintentional plagiarism.
- The ability to find information from a range of sources.
- The ability to produce a piece of academic writing which draws on material from a range of sources.
- The ability to design and deliver an oral presentation on an academic topic.

### Outline Content

- Using academic Information Sources
- Presentation of Academic Information.
- Academic writing skills for essays and papers.
- Design of material for oral presentations.
- Oral presentation skills.

<b>Delivery Methods</b>	Lectures (6 hrs); Tutorials (8hrs); Student conference (2 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 16 hrs; Independent: 84 hrs	
<b>Supporting Texts</b>	Kneale P. (1999) <i>Study Skills for Geography students</i> Knight, P. G. and Parsons, A.J. (2003) <i>How to Do Your Essays, Exams and Coursework in Geography and Related Disciplines</i>	
<b>Assessment</b>	Coursework: 40% (Semester One Essay), 40% (Semester Two Report), 20% (Group verbal presentation)	
<b>Staffing</b>	<b>Dr Gunnar Mallon</b> plus all academic staff	

# GEO164 Understanding and Managing Environmental Issues

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography; BSc Environmental Science
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

## Description

This module will introduce students to a wide range of environmental issues facing the world today. Issues such as climate change, water resources, water quality, large-scale land use change, biodiversity loss and human vulnerability to natural hazards will be considered. The physical processes underlying these issues will be explored and different management responses will be evaluated. In the final part of the module, students will have the opportunity to investigate a specific case study in detail.

## Aims

- To investigate a range of global environmental issues, with reference to examples.
- To assess and critically evaluate management responses (policy and practical) to environmental issues.
- To apply scientific principles to real world situations.
- To develop skills in group working and presentation.




## Learning Outcomes

By the end of the module, students will be able to demonstrate:

- An understanding of the causes and consequences of a range of environmental issues.
- An understanding of management responses to a range of environmental issues.
- The ability to design and deliver a poster presentation as part of a small group.

## Outline Content

- Climate change.
- Water resources and pollution.
- Land use change.
- Loss of biodiversity.
- Natural hazards.
- Environmental management approaches.
- Student poster conference on case studies with critical evaluation of management approaches.

<b>Delivery Methods</b>	Lectures (16 hrs), Seminars (2 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 18 hrs; Independent: 82 hrs	
<b>Supporting Texts</b>	There is no single supporting text for this course	
<b>Assessment</b>	Examination: 60%; Coursework: 40% (Poster)	
<b>Staffing</b>	<b>Dr Andrew Dean</b>	

## GEO165 New Horizons in Geography

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography; BSc Geography Approved for Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	None

### Description

Academic Geography is a wide and vibrant field. Geographers contribute actively to new intellectual debates in the sciences, social sciences, and humanities. And their work addresses some of the most pressing issues facing the modern world, from climate change to social inequality, informing policy and practice. The module provides level 1 Geography students with a challenging but accessible insight into the cutting edge of contemporary geographical research and how it helps us understand our changing world. It therefore serves as bridge between the general introductory modules of the level 1 BA and BSc courses in Geography, and the more specialist modules taught at levels 2 and 3. Furthermore, it provides an opportunity to see the difference that a geographical perspective can make to our understanding of some of the largest challenges facing the world. Each year, a selection of topical issues in contemporary physical and human geography will be explored by academics actively engaged in cutting edge research on those subjects. The course will be taught via lectures and guided reading.

### Aims

- To provide students with an insight into new developments in physical and human Geography.
- To demonstrate how geographers contribute to contemporary debates and issues affecting society and the environment.
- To illustrate the ways in which geographers communicate their latest research to academic and other audiences.




### Learning Outcomes

By the end of the module, a student should display:

- An understanding of the new developments in physical and human geography discussed in the module.
- An appreciation of the ways in which geographers contribute to contemporary debates and issues affecting society and the environment.
- An ability to synthesise relevant material, as an adjunct to the lectures, from the set reading list, provided in the lectures.

### Outline Contents

A range of contemporary topics on physical and human geography will be covered.

<b>Delivery Methods</b>	Lectures (20 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Where applicable, reading lists will be provided by individual lecturers	
<b>Assessment</b>	Examination: 100%	
<b>Staffing</b>	<b>Dr Andrew McGonigle</b> , Dr Felix Ng, Professor Richard Phillips, Professor Jenny Pickerill, Professor Peter Jackson	

## GEO166 Earth's Evolution

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography Environmental Science; BA Geography & Planning Not available to other degrees
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

### Description

This module aims to give students an understanding of the origin and history of the Earth and of the legacy of past events on landscape evolution and the processes therein. It will include explanations of tectonic, igneous, sedimentary, and metamorphic activity, the history of crustal processes as well as reviewing the development over geological time of the evolution of the geosphere, atmosphere, hydrosphere and biosphere. In doing so, students will be introduced to the concepts of rock formation, weathering and erosion, geological time, and geological structures, as well as key characteristics of the main rock types.

A one-day field-based excursion will demonstrate how the geology and landscape history of the local region influences the scenery, environment and economy.




### Aims

- An understanding of the origin and history of the Earth.
- An understanding of the legacy of past events on the landscape and the processes operating on the landscape.

### Learning Outcomes

By the end of the module, students will be able to demonstrate:

- Knowledge of the origin and history of the Earth.
- An appreciation of the legacy of past events on present-day geology, landscape, and surface environments.
- Basic skills in rock structure and composition.
- An appreciation of how Earth's geological evolution has affected the geology, landscape and economy of the Sheffield region.

<b>Delivery Methods</b>	Lectures (10 hrs); Practical classes (12 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 22 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Where applicable, reading lists will be provided by individual lecturers	
<b>Assessment</b>	Examination: 50%, Coursework: 30% (poster), 20% (lab assessment)	
<b>Staffing</b>	<b>Prof Ed Rhodes</b> , Prof Mark Bateman	

## GEO167 Geospatial technologies

<b>Level</b>	1
<b>Credits</b>	10
<b>Availability</b>	Core for BSc Geography; BA Geography; Environmental Science Approved for Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	None

### Description

Geospatial technologies (involving: remote sensing, GIS, GPS) have changed the way businesses and policy makers solve problems and the way scientists understand the dynamics of the earth system. These technologies are routinely used by people in their work and their daily life (e.g. via Google Earth). This module will introduce students to some of the important sources of geospatial data and the technologies underpinning them, and will highlight ways in which they are used both within Geographical Science and more widely. In addition students will gain hands-on, skills-based experience in processing and analysing data using GIS and Remote Sensing software.

### Aims

- To introduce concepts of digital spatial data manipulation, processing, and visualisation.
- To introduce concepts of Earth observation and remote data acquisition techniques.
- To apply data manipulation and visualisation methods to a range of geographical applications.




### Learning outcomes

By the end of the module a student will be able demonstrate:

- Knowledge of key Geospatial Technologies (GIS, Remote sensing).
- An appreciation of how digital spatial data are collected, processed and used.
- Basic skills in using and analysing geospatial data.

### Outline Contents

- Sources of spatial data.
- Uses of spatial data.
- GIS for handling spatial data.
- Remote sensing as a source of spatial data.
- Energy, sensors and satellites.
- Image analysis.

<b>Delivery Methods</b>	Lectures (10 hrs); Practical classes (10 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Coursework: 100% (two reports)	
<b>Staffing</b>	<b>Mr Stephen Wise</b> , Dr Robert Bryant	

## GEO206 Environmental Change

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO101 and GEO108

### Description

Huge changes at a global, regional and local scale have occurred in the last 2.6 million years of the earth's history (Quaternary period). These changes are ongoing with implications for both present and future environments. Methods and techniques to investigate past environmental changes are outlined and illustrated. The course will also raise issues related to the problems of distinguishing natural variability from that caused by humans, and the contribution of modelling to understanding and predicting changes in the environment.

### Aims

- To illustrate how past changes in environmental systems can be reconstructed and used to model future changes.
- To demonstrate the variability of environmental change at different spatial and temporal scales.
- To develop an awareness of the contributions made by human activity to changes in the physical environment.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- An understanding of the differences between proxy and instrumental data.
- An understanding of a variety of sources from which an understanding of the past environmental changes can be reconstructed.
- Knowledge of the types, effects and periodicity of environmental changes over the last 2.5 million years.
- An understanding of some of the difficulties associated with predicting both human impacts and future environmental changes.

### Outline Contents

- Reconstruction of past environments.
- Forcing mechanisms of climate change.
- Long term environmental change.
- Human impact on environmental change and future environmental changes.

<b>Delivery Methods</b>	Lectures (25 hrs); Practical class (3 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 34 hrs; Independent: 167 hrs	
<b>Supporting Texts</b>	Lowe, J.J. and Walker, M.J.C. (1997) <i>Reconstructing Quaternary Environments</i> Williams et al (1998) <i>Quaternary Environments</i> Wilson, R.C.L. et al (2000) <i>The Great Ice Age: Climate Change and Life</i>	
<b>Assessment</b>	Examination: 67%; Coursework: 33% (Essay)	
<b>Staffing</b>	<b>Professor Mark Bateman</b> , Dr Julie Jones, Dr Felix Ng	



## GEO210 Geographic Information Systems

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO167 (or equivalents in other departments)

### Description

Geographic Information Systems (GIS) are computer systems for the storage, display and manipulation of geographical data. This module is an introduction to such systems for those with no previous knowledge of them. The module will cover the main concepts related to handling geographical data on a computer and introduce a range of practical applications of GIS in research, industry and commerce. Students interested in this module who have not taken GEO161 (the pre-requisite) but who believe they have equivalent knowledge should contact the Department.

### Aims

- To introduce Geographic Information Systems (GIS) to those with little or no previous experience of them.
- To provide practical experience in using GIS software.
- To consider the real-world context in which GIS are used.




### Learning Outcomes

By the end of the module, a student should display:

- Demonstrate knowledge of the core concepts relating to the handling of spatial data on the computer.
- Illustrate these ideas with reference to applications of GIS.
- Demonstrate knowledge of some of the issues relating to the capture and use of spatial data in real applications.

### Outline Contents

- Introduction to geographical data handling.
- Data display in GIS.
- Data analysis in GIS.
- Vector and raster systems.
- Data input.
- Organisational issues.

<b>Delivery Methods</b>	Lectures (14 hrs); Practical classes (6 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Heywood, I., Cornelius, S. and Carver, S. (2006) <i>An Introduction to Geographic Information Systems</i>	
<b>Assessment</b>	Examination: 50%; Coursework: 50% (Assessed practical)	
<b>Staffing</b>	<b>Mr Stephen Wise</b>	

## GEO211 Applied Remote Sensing

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO167

### Description

Remote Sensing (RS) refers to the science of identification of earth surface features and estimation of their geo-biophysical properties through the detection of electromagnetic radiation. RS data are a key component in our understanding of global processes, as they: (1) provide a unique perspective from which to observe large regions, (2) are able to measure energy at wavelengths which are beyond the range of human vision, and (3) can provide repetitive coverage with calibrated sensors to detect change. This course provides instruction and practical experience in basic RS data collection, processing and use. Important geographical applications of RS data are introduced, including: land cover mapping, LiDAR, aerosol remote sensing (mineral and volcanic), thermal remote sensing and SAR/InSAR. Some prior knowledge of RS systems is assumed.

### Aims

- To introduce remote sensing as an important enabling tool for earth surface research problems and applications.
- To examine the basics of remote sensing and the main satellite/sensor systems in use.
- To provide practical experience of remote sensing applications (Lab-based).




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- An understanding of the basic physical principals underpinning the collection and use of a wide range of RS data types.
- Knowledge of basic processing methods and output data-types derived from RS data using industry-standard software.
- An understanding of key application of RS data for regional/global monitoring.

### Outline Contents

- The RS Approach, energy matter/atmosphere interactions, turning numbers into data.
- Applications in the VNIR (eg Land cover mapping/change, LiDAR).
- Applications in the UV (eg mineral and volcanic aerosols).
- Applications in the TIR (eg water and SST).
- Applications in the Microwave (eg SAR/InSAR).

<b>Delivery Methods</b>	Lectures (13 hrs); Practicals (9 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 22 hrs; Independent: 78 hrs	
<b>Supporting Texts</b>	Lillesand, T.M. & Kiefer, R.W. (2007) <i>Remote Sensing and Image Interpretation</i> (5th Edition) Campbell J.B. & Wynne, R.H. (2011) <i>Introduction to Remote Sensing</i> (5th edition)	
<b>Assessment</b>	Coursework: 100% (TBC)	
<b>Staffing</b>	<b>Dr Rob Bryant</b>	

## GEO217 Environment, Society and Politics

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO103 or GEO112

### Description

Environmental issues are a key area of contemporary public concern and current political debate. They raise fundamental questions about the relationship between society and environment. This module provides a geographical introduction to these issues and debates with examples from a range of scales from the global to the local. After a review of key concepts, the module is developed in three inter-related sections covering energy, waste and food. Students are expected to develop and present their own ideas in group-based activities and workshops.

### Aims

- To familiarise students with some of the main theories and concepts for understanding society-environment relations including notions of risk, practice and sustainability.
- To illustrate how these theories and concepts can be applied to understand current issues in three key sectors (energy, waste and food).
- To examine the process of environmental policy formation in these three sectors and the relationship between environmental regulation and everyday life.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- An understanding of some key theoretical and conceptual approaches to society and environment relations.
- Knowledge of how these approaches can be applied to contemporary environmental issues in relation to themes of energy, waste and food.
- An appreciation of the challenges posed for environmental policy-making in these key sectors.

### Outline Contents

- Introduction
- Approaching Environment and Society.
- Thematic blocks on:
  - a. Energy
  - b. Water
  - c. Waste
  - d. Food
- Review and revision workshop.

<b>Delivery Methods</b>	Lectures (20 hrs)
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs
<b>Supporting Texts</b>	No single supporting text
<b>Assessment</b>	Examination: 100%
<b>Staffing</b>	<b>Dr Matt Watson</b> , Dr Megan Blake

### Skills



## GEO221 Geographies of Development

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO103 or GEO112

### Description

Development in the Global South is a major issue of international concern in the 21st century. This module explores contemporary development issues and examines the contribution that geographers, and geographical thought, can make towards understanding inequality, poverty and socio-economic change. Definitions of 'development', 'poverty' and 'the poor' shift and change, and these terms are invested with political meaning which reflect specific geographies and ways of seeing the world. This module addresses diverse theories, paradigms and contemporary critiques of development, and explores some of the central issues affecting processes of development. Case examples are drawn from Latin America, Africa and South-East Asia.

### Aims

- To illustrate that definitions of 'poverty' and 'the poor' shift and change across space and time.
- To highlight that these terms are invested with political meaning which express specific geographies and ways of seeing the world.
- To gain a clear understanding of contemporary approaches towards 'development'.
- To understand the interrelatedness and interconnectedness of countries North and South ('developed' and 'developing').




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- A critical understanding the origins of development paradigms.
- The ability to critically assess the factors influencing development planning at local and global levels.
- The ability to outline, analyse and discuss key development processes at a range of scales, including linking local issues to regional initiatives and sub-regional and global policy discourses.

### Outline Contents

- Theories of Development – defining development, the legacies of colonialism, development paradigms, globalisation and development.
- Development in Practice – poverty and inequality, the environment-development interface, institutions communities and development.
- Spaces of Development – North-South: an interdependent world, urban spaces, rural spaces.

<b>Delivery Methods</b>	Lectures (20 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Potter, R., Binns, T., Elliot, J. and Smith, D. (2008) <i>Geographies of Development</i> (3rd edition).	
<b>Assessment</b>	Examination: 100%	
<b>Staffing</b>	<b>Dr Matthew Tillotson, Dr Tom Gillespie</b>	

## GEO223 Philosophical Issues in Human Geography

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography Approved for BSc Geography; BA Geography and Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO103, GEO112, GEO151 and GEO163
<b>Co-requisite</b>	GEO264

### Description

School syllabuses present human geography as a practical, applied subject, one with a factual basis and a problem-solving approach. It is easy to get the impression that there is a longstanding, unproblematic consensus amongst human geographers regarding what the subject is about, how geographical research should be conducted, and what students should be taught. However at university level it is vital to recognise that philosophical concepts and theoretical debates, past and present, have shaped how human geography is understood and conceived.

### Aims

The aims of this module are to:

- Introduce students to some of the key concepts that underpin geographical concerns.
- Introduce students to the ways in which geographic thought and practice has interpreted and mobilised philosophic concepts.
- Develop an awareness of the linkages between theoretical standpoints and methodological/ pedagogical techniques.




### Learning Outcomes

By the end of the module, a student will be able to:

- Identify major philosophical issues and debates within human geography.
- Demonstrate understanding of major philosophical issues and debates within human geography.
- Critically discuss such debates and the relations between them.
- Understand and discuss the linkages between theoretical standpoints and substantive foci.
- Demonstrate an awareness of the plurality of intellectual traditions within human geography.
- Demonstrate an awareness of the interdisciplinary linkages between human geography and cognate social science and humanities disciplines.

### Outline Contents

- Bodies of Knowledge: Discipline, Affect, Emotion.
- The Political: Structure and Agency.
- Mappings: Representation, Image, Text.

<b>Delivery Methods</b>	Lectures (20 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 80 hrs	
<b>Supporting Texts</b>	Anoop Nayak and Alex Jeffrey, 2011 Geographical Thought: an Introduction to Ideas in Human Geography London: Prentice Hall/Pearson	
<b>Assessment</b>	Examination: 66%; Coursework 34% (TBC)	
<b>Staffing</b>	<b>Prof Richard Phillips</b> , Dr Jessica Dubow, Dr Seth Schindler	

## GEO231 Socio-spatial Analysis

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO152

### Description

Many problems in modern social science, both pure and applied, demand the use of socio-spatial analysis approaches for the interrogation of relatively large, spatially structured datasets. Good examples include health policy, education, political issues, economic regeneration, crime and migration.

The module is designed to provide students with a solid grounding in the proper application of socio-spatial analysis, and an appreciation of its role in the study of contemporary society. This is achieved through a combination of lectures, practicals and seminars which cover the underlying ideas, provide hands-on experience and give examples of the methods' application in the literature. The module covers regression, spatial statistics, and multivariate analysis.




### Aims

- To provide students with an overview of socio-spatial analytical methods for human geography.
- To make students aware of a range of data analysis techniques employed in social science research.
- To give students a theoretical and practical grounding in the application of socio-spatial analysis.
- To allow students to understand research literature employing socio-spatial analysis.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- An appreciation of a range of quantitative socio-spatial analytical techniques.
- The ability to use socio-spatial analysis to address research questions.
- The ability to interpret the results of socio-spatial analyses.
- A critical understanding of the use of socio-spatial analytical techniques in modern social science.

<b>Delivery Methods</b>	Lectures (9 hrs); Practical classes (9 hrs); Seminars (3 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 21 hrs; Independent: 79 hrs	
<b>Supporting Texts</b>	Rogerson, P.A. (2001) <i>Statistical Methods for Geographers</i> Field, A. (2009) (3rd ed.) or (2013) (4th ed.) <i>Discovering statistics using SPSS</i>	
<b>Assessment</b>	Examination: 80%; Coursework 20% (3 x practical assessments)	
<b>Staffing</b>	<b>Professor Charles Pattie</b> , Dr Adam Whitworth	

## GEO233 Glacial Environments

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO101 and GEO108

### Description

This module covers topics relevant to glacial environments of the world, including both contemporary and former ice sheets and glaciers. Firstly we examine how glaciers and ice sheets come into existence through an understanding of climate and the concept of glacier mass balance. How glaciers work (ice flow, interaction with their beds etc) is dealt with via sections on glaciology and glacier hydrology. How glaciers modify the underlying landscape is dealt with via a section on glacial geomorphological processes and landforms, and the sedimentary products of glaciations via a section on glacial geology.

### Aims




This module aims:

- To introduce the components of the cryosphere, with a focus on glaciers and ice sheets.
- To understand how glaciers flow attempt to maintain a balance with their climate drivers.
- To understand the processes that act to erode and shape glacial landforms and landscapes.
- To illustrate the diversity of glacial environments and near-glacial (periglacial) environments.

### Learning Outcomes

By the end of the module, a candidate will be able to:

- Demonstrate an understanding of glaciology, glacier hydrology, glacial geomorphology and geology.
- Gain insight into how research approaches have produced such knowledge.
- Be appreciative of levels of uncertainty in our current understanding of glacial environments and the main challenges for the future

<b>Delivery Methods</b>	Lectures (31 hrs) Practical classes (2 x 3 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 37 hrs; Independent: 163 hrs	
<b>Supporting Texts</b>	Benn & Evans (2010) <i>Glaciers &amp; Glaciation</i>	
<b>Assessment</b>	Examination: 67%; Coursework: 33% (2 x practical reports)	
<b>Staffing</b>	<b>Dr Darrel Swift</b> , Professor Mark Bateman, Professor Chris Clark	

## GEO234 Atmospheres and Oceans

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO101

### Description

This module will give students an understanding of the global climate, focusing on the atmospheres, the oceans, and their interaction. The first part of the module will consider the main characteristics of, and processes behind, climate from the global to the local scale. The second part of the module will examine the physical characteristics of the oceans and their geographical variation, and the role of the oceans in the climate system.

### Aims

This unit aims to:

- Further develop knowledge of the characteristics of the global climate system.
- Develop understanding of the processes behind climate at a global, regional and local scale.
- Identify the characteristics of, and processes underlying, the physical properties of the ocean.
- Develop an awareness of the role of the oceans in the earth system.
- Give an appreciation of links between atmosphere, ocean and climate.




### Learning Outcomes

By the end of the unit, a student will be able to:

- Demonstrate knowledge of the main features of global climate.
- Identify the dominant processes shaping the mean climate and causing climate variability at a range of scales.
- Demonstrate a firm grasp of the characteristics and underlying processes of the oceans.
- Understand how the oceans interact with the rest of the climate system.

### Outline Contents

- Global climates: the Earth's radiation balance, forces in the atmosphere.
- The atmospheric general circulation, modes of interannual variability.
- Regional climates: mid-latitude and tropical.
- Atmospheric moisture and stability.
- Local-scale atmospheric circulations; microclimate.
- Basic introduction to physical oceanography.
- The ocean general circulation: properties and theories.
- The tropical ocean; El Nino.
- The polar ocean and sea ice; deep convection and the thermohaline circulation.
- The role of the oceans in climate.

<b>Delivery Methods</b>	Lectures (20 hrs), Practicals (20 hrs), Fieldwork (2 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 42 hrs; Independent: 158 hrs	
<b>Supporting Texts</b>	Barry and Chorley, (2003) <i>Atmosphere, Weather and Climate</i> . O'Hare, Sweeney and Wilby, (2005) <i>Weather, climate and climate change: human perspectives</i> .	
<b>Assessment</b>	Examination: 60%; Coursework: 40% (practical write-up)	
<b>Staffing</b>	<b>Dr Julie Jones</b> , Professor Grant Bigg	
<b>Additional Costs</b>	There are no costs associated with fieldwork for this module.	



## GEO241 Social and Cultural Geographies

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO112

### Description

This module builds on GEO112: Introducing Social and Cultural Geographies. It encompasses a range of key debates, concepts and themes that have shaped and continue to drive cultural and social geographic scholarship. These debates and issues will be explored via three complementary frameworks: i) Place: discourse and practice; ii) Culture: landscape, nature; iii) Memory: space, history. The module adopts a broadly geographical perspective but makes a series of interdisciplinary connections to other social sciences and to the arts and humanities.

### Aims

- To develop students' understanding of key thematic and conceptual issues in contemporary social and cultural geographies.
- To enhance student's critical awareness of contemporary dimensions of society and culture.
- To encourage interdisciplinary thought required within contemporary social and cultural geography.




### Learning Outcomes

By the end of the module, a student will have:

- A clear understanding of the thematic scope and conceptual depth of contemporary social and cultural geographic scholarship.
- An ability to critically engage with contemporary geographic dimensions of society and culture.
- A capacity to demonstrate an awareness of the interdisciplinary currents within social and cultural geographies.

### Outline Contents

- Place: discourse and practice.
- Memory, space and history.
- Geographies of Difference.

<b>Delivery Methods</b>	Lectures (20hrs); Seminars (10 hrs); Fieldwork (6 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 36 hrs; Independent: 164 hrs	
<b>Supporting Texts</b>	No single supporting text	
<b>Assessment</b>	Examination: 34%; Coursework: 66% (Two essays)	
<b>Staffing</b>	<b>Professor Richard Phillips</b> , Professor Peter Jackson, Dr Jessica Dubow	
<b>Additional Costs</b>	There are no costs associated with fieldwork for this module.	

## GEO242 Health, Place and Society

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	None

### Description

This module will introduce students to the concept of social determinants on people's life chances. The module will concentrate on current understandings of the social determinants, for example, good and poor health, educational opportunities, employment, inequality and injustice. The module will build a student's understanding of how place and society impact upon the lives of individuals in many ways, but with a significant focus on health and well-being. Examples will be used from all scales from the global to the local.

### Aims

This module aims to interest, enthuse and motivate students in the study of health, place and society. Students will understand the global and local contexts of the determinants of life chances in social environments. Key to this is the understanding of how society and place impact on the lives of all people in many ways, but with a heavy focus on people's health and wellbeing.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- The ability, within the context of health, place and society, to assess the merits of contrasting theories, explanations and policies.
- An understanding of the effects of social determinants on the lives of people with particular reference to people's health.
- The ability to present and explain both visually and textually both evidence and theory on the interactions between health, place and society.
- The capability to judge and evaluate evidence and assertions.
- The ability to develop a reasoned argument, based on own research and that of others.

### Outline Contents

- Geography of Education.
- Geography of Work and Unemployment.
- Geography of Wealth and Housing.
- Access to health care.
- Other effects on life chances in the UK.
- Social class and inequality.

<b>Delivery Methods</b>	Lectures (25 hrs); Seminars (5 hrs); Practical (3 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 33 hrs; Independent: 167 hrs	
<b>Supporting Texts</b>	Shaw et al. (2002). <i>Health, place and society</i> Gatrell, A. (2002). <i>Geographies of Health</i> Dorling, D. (2005). <i>Human Geography of the UK</i>	
<b>Assessment</b>	Examination: 34%; Coursework: 33% (Essay); 33% (Poster)	
<b>Staffing</b>	<b>Dr Dan Vickers</b>	

## GEO243 Political Geographies

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO103 or GEO112 (or at discretion of the module convenor)

### Description

The module introduces students to contemporary debates within political geography. Political processes are discussed at a variety of spatial scales, from international politics, through national politics, local and community politics and individual political behaviour. Questions of power, efficacy and conflict are examined at all these scales. Particular emphasis is given to spatial and place-specific aspects of politics. Among the issues normally discussed in the module are: geopolitics and international relations; the state and territoriality; the politics of nationalism and citizenship; welfare regimes and the geography of public policy; civic activism; and individual political participation.




### Aims

- Discuss geographical issues in geopolitics and international relations.
- Discuss geographical issues related to the politics of nationalism, citizenship and state formation.
- Examine debates around welfare regimes, the geography of public policy; and civic life and political participation.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate the ability to:

- Understand the role of geography in geopolitics and international relations.
- Understand debates on the politics of nationalism, citizenship and state formation.
- Understand the geographical nature of welfare regimes, the geography of public policy and civic life and political participation.

<b>Delivery Methods</b>	Lectures (29 hrs); Seminars (3 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 32 hrs; Independent: 168 hrs	
<b>Supporting Texts</b>	Flint, C. and Taylor, P. (2007). <i>Political Geography: World-Economy, Nation-State &amp; Locality</i> (5th edition)	
<b>Assessment</b>	Examination: 67%; Coursework: 33% (Essay)	
<b>Staffing</b>	<b>Professor Charles Pattie</b> , Dr Adam Whitworth, Dr Desiree Fields	

## GEO244 Earth and Ecosystem Dynamics

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO101 and GEO108

### Description

This module will develop understanding of environmental processes, fluxes and interactions across a spectrum of temporal and spatial scales. Adopting an earth system science approach, the module will consider interactions between the geosphere, atmosphere, hydrosphere and biosphere to explore the geomorphological, biophysical, and biogeochemical processes that shape the evolution and contemporary dynamics of the environment. Knowledge of these processes underpins global climate and earth system models, prediction of environmental responses to change and approaches to conservation and environmental restoration. Links will be made to all of these throughout the module.




### Aims

- To enhance understanding of global physical processes and systems, with particular emphasis on sediment systems and geomorphology.
- To develop understanding of ecosystem dynamics, with particular emphasis on the processes driving major element cycles (e.g. Carbon and Nitrogen), and the links with earth's 'life support' systems.
- To develop an understanding of ecological biogeography and the interaction of biotic and abiotic processes within the physical environment.
- To develop knowledge and practical experience of laboratory and field skills used to measure and elucidate environmental processes.

### Learning outcomes

By the end of the unit, a candidate will be able to:

- Demonstrate an understanding of weathering flux sources and sinks, the methods used to quantify fluxes in present and past environments, and the significance of fluxes in global physical processes.
- Demonstrate an understanding of ecosystem ecology and biogeochemistry and the significance of element recycling in shaping physical and biological processes, and maintaining the Earth's life support systems.
- Demonstrate an understanding of ecological biogeography and the importance of interactions between biotic and abiotic processes in shaping physical and biological processes at the earth surface.
- Demonstrate an understanding of the earth-system-science approach, including ecosystem ecology and ecological biogeography, and the importance of this approach for understanding the evolution of the environment.
- Design and conduct practical measurements of physical and biological phenomena in the laboratory and the field.
- Apply knowledge and understanding to a practical problem.

<b>Delivery Methods</b>	Lectures (21 hrs), Practical classes (9 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 30 hrs; Independent: 170 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Examination: 70%; Coursework: 30% (3 x Practical reports)	
<b>Staffing</b>	<b>Dr Aga Nowak</b> , Dr Rob Bryant, Dr Gunnar Mallon, Dr Darrel Swift	

## GEO264 Research Design in Human Geography

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Core for BA Geography Approved for BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO151 or GEO152
<b>Co-requisite</b>	GEO223

### Description

This module introduces the principles of research design for human geographers. It places methods of data collection in the overall processes of research, including the identification of a topic of study, formulating research questions and linking them to methods, and conducting a literature review, along with research ethics and safety. Lectures will be complemented by workshops. Summative assessment includes a research project proposal, which forms the basis of the dissertation.




### Aims

- GEO264 introduces students to the key issues which must be considered when designing a research project and writing a research proposal.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- Awareness of the elements which make good research design.
- Capability to conduct literature searches.
- Broad awareness of ethical issues which may arise when conducting social science research.

<b>Delivery Methods</b>	Lectures (5 hrs); Seminars (2 hrs); Practical classes (8 hrs); Supervision (as required – recommended minimum of 4 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 15 hrs; Independent: 85 hrs	
<b>Assessment</b>	Coursework: 20% (Outline proposal); 80% (Project proposal)	
<b>Staffing</b>	<b>Professor Jenny Pickerill</b> , Professor Peter Jackson	

## GEO265 Researching Human Geographies

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO151 and GEO152

### Description

This module builds on previous methods learning to further develop skills and understanding of a range of research approaches used in contemporary human geography. The module focuses on a number of research methodologies to increase the awareness of the appropriateness of certain methods to research design. The module will discuss a number of methodological approaches (eg visual methodologies, participatory research, ethnography, critical realism), the data gathering techniques (eg interviewing, focus groups, visual interpretation, participant observation, diaries, questionnaire surveys, etcetera) and the analytical approaches used to make sense of this data that are used within the various methodological approaches.

### Aims




This unit is designed as part of the methods teaching for Human Geography level 2 students. It will allow students to broaden their understanding of research in human geography. The unit provides an opportunity for undergraduates to develop core skills by:

- Understanding the differences between various methodological approaches
- Knowing which methods to apply to a particular situation.

### Learning Outcomes

By the end of the unit, a candidate will be able to demonstrate:

- An awareness of the diversity of methodological approaches, the associated tools, and analytical methods used in researching human geography.
- In-depth knowledge of a particular method or methodological approach used in researching social phenomena in human geography.

<b>Delivery Methods</b>	Lectures (9 hrs), Tutorials (6 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 15 hrs; Independent: 85 hrs	
<b>Assessment</b>	Coursework: 100% (Critical Essay, Interview Report, and Questionnaire)	
<b>Staffing</b>	<b>Dr Megan Blake</b> , Dr Eric Olund	

## GEO266 Research Skills for Physical Geography

<b>Level</b>	2
<b>Credits</b>	20
<b>Availability</b>	Core for BSc Geography Approved for BA Geography; BA Geography and Planning Not available to Environmental Science; cannot be taken with GEO267
<b>Semester</b>	Academic Year
<b>Prerequisites</b>	GEO101 and GEO108 and GEO150

### Description

The ability to undertake independent research is a key skill in a Geography degree and in many areas of future employment. This module focuses on the philosophical background to undertaking research and on providing practical experience in undertaking and designing small research projects.

### Aims

- To equip students with the knowledge and skills to undertake independent research.

### Learning outcomes

By the end of the unit, a candidate will be able to demonstrate the ability to:

- Write a review and evaluation of the existing literature within a particular area of physical geography.
- Write a research proposal that identifies a research problem in physical geography in the context of existing understanding, provides a methodology for conducting the research, and assesses the contribution that the proposed research may make.
- Present the results of research that they have undertaken in both oral and written form.

### Outline Contents

#### Autumn Semester




- Supervised group projects investigating geographical research questions. Students will choose 2 projects from a selection of 4.
- Tutorials on scientific literature and the development of research ideas.

#### Spring semester

- Lectures and tutorials on how to produce a research proposal.
- Supervision on dissertation topic.
- Field trip to the Blencathra Centre (Lake District National Park) to further research skills.

### Module costs

For core modules, all fieldclass costs are covered by the tuition fee. For this module, this applies to BSc Geography students only. For other students, see 'Additional Costs' below.

<b>Delivery Methods</b>	Lectures (17 hrs); Tutorials (8 hrs); Fieldwork (72 hrs); Workshops (21 hrs); Supervision (as required – recommended minimum of 4 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 122 hrs; Independent: 78 hrs	
<b>Supporting Texts</b>	Knight, P. G. and Parsons, A.J. (2005) <i>How to do your dissertation in geography and related disciplines</i> (2nd Edition)	
<b>Assessment</b>	Coursework: 20% (Semester One Essay); 20% (Semester One Poster); 40% (Semester Two Project Proposal); 20% (Semester Two Group Verbal Presentation at Blencathra)	
<b>Staffing</b>	<b>Dr Darrel Swift</b> plus all Physical Geography staff	
<b>Additional Costs</b>	BA Geography and BA Geography and Planning students may attend the Blencathra fieldclass subject to approval. These students will be required to pay the full cost of the fieldclass (the 2013-14 cost was £300) and there may also be a charge for other fieldwork elements.	

## GEO267 Research Design for Physical Geography

<b>Level</b>	2
<b>Credits</b>	10
<b>Availability</b>	Approved for BA Geography; Environmental Science Not available to BSc Geography; cannot be taken with GEO266
<b>Semester</b>	Academic Year
<b>Prerequisites</b>	GEO101 and GEO108

### Description

The ability to undertake independent research is a key skill in a Geography or Environmental Science degree and in many areas of future employment. This module focuses on the philosophical background to undertaking research and provides experience in the design of small research projects.

### Aims

- This unit aims to equip students with the knowledge and skills to design a piece of independent research.

### Learning outcomes

By the end of the module a student will be able to

- Write a review and evaluation of the existing literature within a particular area of physical geography.
- Write a research proposal that identifies a research problem in physical geography or environmental science in the context of existing understanding, provides a methodology for conducting the research, and assesses the contribution that the proposed research may make.




### Outline Contents

Autumn Semester

- Tutorials on the importance of the scientific literature in the development of research ideas and methods.

Spring semester

- Lectures and tutorials on how to produce a research proposal.

<b>Delivery Methods</b>	Lectures (13 hrs); Tutorials (8 hrs); Workshops (15 hrs); Supervision (as required – recommended minimum of 4 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 40 hrs; Independent: 60 hrs	
<b>Supporting Texts</b>	There are no specific supporting texts for this module	
<b>Assessment</b>	Coursework: 33% (Semester One Essay); 67% (Semester Two Project Proposal)	
<b>Staffing</b>	<b>Dr Darrel Swift</b> plus all Physical Geography staff	



## GEO302 Extended Geographical Essay

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BSc Geography; BA Geography
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO264 or GEO266

### Description

This module requires the student to prepare, research and write up a piece of work based on previous studies on a geographical topic. The student will choose a topic and will be required to produce an extended essay on that topic, synthesising and developing a critique on the existing literature available in the Sheffield libraries.

### Aims

- To give students experience in carrying out the research involved in literature-based survey projects.
- To enable students to develop and demonstrate the skills of bibliographic search and of argument structuring gained at levels 1 and 2 of their degree programme.

### Learning Outcomes




By the end of the module, a student will be able to demonstrate:

- The ability to conceptualise a clear research question arising from a key geographic debate.
- The ability to design and carry out a programme of literature-based research, involving the collation and analysis of academic literature, appropriate to answering the question under investigation.
- The ability to critically analyse and review literature competently and appropriately.
- The ability to write a substantial essay, which summarises and evaluates relevant literature, arguments and debates.

### Outline Contents

The majority of the work on this module will be independent study by the student, identifying, researching and writing up their chosen topic. Help and advice will be provided as follows

- Introductory lecture.
- Group tutorials on what makes a good research topic and essay.
- Students will be encouraged to seek further supervision and feedback on their progress.

<b>Delivery Methods</b>	Lecture (1 hr); Tutorials (3 hrs); Supervision (3 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 7 hrs; Independent: 193 hrs	
<b>Supporting Texts</b>	Kneale, P. (2003) <i>Study Skills for Geography Students: A Practical Guide</i>	
<b>Assessment</b>	Coursework: 10% (Essay Proposal); 90% (Essay)	
<b>Staffing</b>	<b>Dr Darrel Swift</b>	

## GEO323 Social Geography of Europe

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO242 or GEO243

### Description

A considerable number of social issues in contemporary Europe have important geographical aspects, at a number of scales. The aim of this module is to consider a number of these social issues, focussing especially on their manifestation at the local and regional scales. Particular emphasis will be placed on evidence drawn from vernacular sources such as news media as supplements to academic study. The topics to be considered will vary from year to year but may include urban social geography, ethnic minority communities, housing, rural isolation, and regional identities.

### Aims

This module aims to:

- Extend students' abilities to analyse contemporary issues across European societies.
- Extend students' transferable skills in inquiry-based learning and teamwork.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- An awareness of the geographic dimensions of social issues in Europe.
- An understanding of the ways in which wider forces translate into different local social outcomes.
- The ability to undertake and report on comparative analyses of social issues in different European countries and contexts.
- The ability to work in a team with others on inquiry-based activities and to present findings in an open forum.

### Outline Contents

- Introduction to social issues in Europe, highlighting diversities of cultural, political, historical, economic and societal contexts within which contemporary forces are played out.
- A number of topics will be investigated in depth: these will alter from year to year in part in relation to student interests.

<b>Delivery Methods</b>	Lectures (7 hrs); Seminars (15 hrs); Tutorials (2 hrs); Practical classes (6 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 30 hrs; Independent: 170 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Examination: 67%; Coursework: 33% (Project report)	
<b>Staffing</b>	<b>Professor Paul White</b>	

## GEO327 Geography of Elections

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO243 or equivalent (as approved by the module convenor)

### Description

This module reviews current research on the political geography of elections, dealing with both electoral behaviour and the politics of the electoral process. Elections are placed in their broad social and geographical contexts. The course will examine how elections contribute to the development and use of power and legitimacy in political systems. Most attention will be given to the analysis of the electoral decision: what influences voters' choices? How does geography impact upon those choices? Contextual models of voting, which see the voter as part of a wider spatial set of relations, are discussed. Attention will also be focused on the activities of political parties and of electoral systems in creating "electoral spaces".

### Aims

This module aims to:

- Outline recent work in electoral geography.
- Explore the links between geography and political power.
- Develop students' critical awareness of political and geographical processes.

### Learning Outcomes

By the end of the module, a student should be able to demonstrate:

- An understanding of the social and geographic factors influencing electoral behaviour.
- A critical awareness of debates in contemporary electoral geography.
- The ability to think analytically about electoral processes.

### Outline Contents

- Introduction (1 lecture).
- Alternative electoral systems (1 lecture).
- Models of voter choice (5 lectures): rational choice; party identification; class cleavage; dealignment; consumption approaches; public opinion; economic voting.
- Geographies of party support (1 lecture): electoral cleavages and electoral geography; regional geographies of the vote; geography and dealignment; economic geography and electoral geography.
- Geographical influences on the vote (2 lectures): the neighbourhood effect; local political cultures; electoral campaigning; redistricting; electoral abuse.

<b>Delivery Methods</b>	Lectures (20 hrs), Seminars (10 hrs)
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 180 hrs
<b>Supporting Texts</b>	Johnston, R.J. and Pattie, C.J. (2006) <i>Putting Voters in Their Place</i>
<b>Assessment</b>	Examination: 67%; Coursework: 33% (Project)
<b>Staffing</b>	<b>Professor Charles Pattie</b>

### Skills



## GEO336 Development and Global Change

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO217 or GEO221

### Description

The aim of this module is to critically examine the development process within a global context, drawing on examples from developed and developing nations. Attention is given to the different ways in which we in the West understand 'development', and how we can reflect more critically on our position, and the power relations within this process. Drawing on debates within development geography, and other disciplines, the course is structured around key topics drawn from the following: violence and security, local forms of resistance and environmental action, sovereignty and post colonialism, the commodification of culture through tourism, corporate social responsibility.




### Aims

- To examine the development process within a changing global context.
- To explore contemporary debates within geography and development.
- To develop students' critical awareness of development processes.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- A critical understanding of the development processes and the links between local and global issues.
- Recognition and understanding of the relationship between power and development.
- Analysis and evaluation of key development processes at a range of scales, including linking local issues to regional initiatives and sub-regional and global discourses.

<b>Delivery Methods</b>	Lectures (14 hrs); Seminars (6 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 20 hrs; Independent: 180 hrs	
<b>Supporting Texts</b>	No single text	
<b>Assessment</b>	Examination: 67%; Coursework: 33% (Project Work)	
<b>Staffing</b>	<b>Dr JoJo Nem Singh</b> plus other staff to be confirmed	

## GEO345 Glacial and Periglacial Geomorphology

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO206 or GEO233

### Description

This module will examine geomorphological aspects of the cryosphere, giving emphasis to the study of landforms and sediments created by ice sheets and periglacial processes both past and present. The dynamic relationship between both these components of the cryosphere will also be highlighted. Where relevant, the applied aspects of glacial and periglacial geomorphology will be given specific attention, particularly in the contexts of ice sheet reconstruction and permafrost degradation.

### Aims

- To gain an understanding of how glacial and periglacial systems operate.
- To examine the extent and geographic diversity of glacial and periglacial landforms both past and present.
- To demonstrate the relationship between process and form.
- To illustrate how glacial and periglacial geomorphology can be used to reconstruct former environments.
- To gain an understanding of how glacial landforms can be used to reconstruct palaeo ice sheets.
- To consider likely future changes in periglacial environments in particular permafrost degradation in relation to global warming.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- Knowledge of typical processes and landforms in glacial and periglacial environments.
- Research-level understanding of controversies and competing theories.
- Understanding of how glacial and periglacial evidence can be used to reconstruct past environments.

### Outline Contents

- Lectures designed to address the above aims.

<b>Delivery Methods</b>	Lectures (25 hrs), Practicals (5 hrs)
<b>Learning Hours</b>	Scheduled: 30 hrs; Independent: 170 hrs
<b>Supporting Texts</b>	Benn and Evans (2010) <i>Glaciers and Glaciation</i> (2nd Edition)
<b>Assessment</b>	Examination: 100%
<b>Staffing</b>	<b>Professor Chris Clark</b> , Professor Mark Bateman

### Skills



## GEO347 Geo-Environmental Project

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Restricted to Environmental Science
<b>Semester</b>	Autumn
<b>Prerequisites</b>	None

### Description

This module provides students with the opportunity to perform and report on a piece of original research work within a Geo-environmental context. The student will decide upon a topic, with guidance from their supervisor then investigate this, either by collecting and analysing their own data, or through secondary study of information drawn from existing sources. The finished product is presented in the style, and at the length, associated with academic journal articles.

### Aims

- To give students the experience of carrying out an original research project under supervision.

### Learning Outcomes




By the end of the module, a student will be able to demonstrate:

- The ability to design and carry out a programme of research, involving the collation and analysis of either original or secondary data, appropriate to answering the research question under investigation.
- The ability to analyse research data competently and appropriately.
- The ability to write a substantial research report, summarising relevant literature methodology, and results.

### Outline Contents

Students will be assigned to supervisors during semester 2, level 2: this will be achieved for the Environmental Mathematics students via GEO263, and for the Environmental Science students, via a meeting, which the GEO347 convenor will arrange. The student will develop a specific research topic, with guidance from their supervisor.

Students will then acquire their data (from existing sources if these are secondary), or collect their own data, involving field work (eg during the vacation between L2 and L3) and/or laboratory work. During their first semester at level 3 students will work on the analysis of their data and on the presentation of their results, with a limited amount of advice from an individual supervisor.

<b>Delivery Methods</b>	Tutorials (5 hrs); Workshops (6 hrs); Supervision (as required – a minimum of 5 hrs is recommended)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 16 hrs; Independent: 184 hrs	
<b>Supporting Texts</b>	None	
<b>Assessment</b>	Coursework: 100% (Dissertation)	
<b>Staffing</b>	<b>Dr Felix Ng</b>	

## GEO352 Natural Hazards

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO101

### Description

This module focuses on a number of selected topics related to the geosphere where natural phenomena and circumstances (and sometimes man's attempts to manage them) may result in deleterious, and frequently catastrophic, effects on both man and the environment. In each case the nature and underlying causes of the 'natural hazard' are explained and the effects, including those on the biosphere in general and humans in particular, are examined and discussed in some depth. Each topic is illustrated with historical or contemporary examples and includes an examination of any ways in which mankind may mitigate the extent of such hazards in the future.

### Aims

- Increase the students' awareness of the existence, effects and seriousness for man and the environment of some of the more important natural hazards.
- Give the students an insight into the potential problems and consequences arising from man's attempts to utilise, and/or interfere with, the natural environment.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- Demonstrate knowledge of the nature and consequences of the natural hazards covered.
- Show an understanding of the fundamental scientific principles underlying each of the specific hazards.
- Explain how modern science and engineering technology may be able to prevent or reduce the hazard in each case and demonstrate an appreciation of their limitations.

### Outline Contents

Topics covered include radioactive waste management, risk assessment, river flooding, hydrological and meteorological hazards and volcanism.

<b>Delivery Methods</b>	Lectures (30 hrs), Practicals (5 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 35 hrs; Independent: 165 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Examination: 75%; Coursework: 25% (group presentation)	
<b>Staffing</b>	<b>Dr Andrew McGonigle</b> , Professor Grant Bigg, Professor Neil Chapman (Civil & Structural Engineering)	

## GEO354 Contemporary Climate Change and Processes

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	None

### Description

This module will involve the study of climate, with the emphasis on climatic forcing factors, observations and modelling of the climate system, and ice-climate links, all on the contemporary timescale (past few to next few centuries). The underpinning geophysics will be presented, but using the minimum of mathematics, in order to gain the fullest understanding of processes involved. We will also look at societal implications of climate change.

### Aims

- To demonstrate ways of measuring and modelling climate change.
- To provide an understanding of climate processes & change.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- Understand how climate is inextricably coupled with other physical components of the Earth system.
- Competently handle, statistically manipulate and interpret data in the real world.
- Recognise and quantify the sensitivity of numerical climate models to inputs.
- Construct and discuss conceptual models which simulate variability in the climate system.

### Outline Contents

- Introduction and course outline.
- Measuring Climate: observational record and statistics for climate studies (2 lectures).
- Our Sun: a variable star and its effect on climate.
- Volcanoes: indexing eruptions.
- Ice in the climate system and ice-sheet mass balance (2 lectures).
- The Greenhouse Effect and Global Warming.
- Climate feedbacks.
- Climate modelling.

<b>Delivery Methods</b>	Lectures (19 hrs); Seminars (10 hrs); Practicals (4hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 33 hrs; Independent: 167 hrs	
<b>Supporting Texts</b>	IPCC (2013) <i>The Physical Science Basis Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change</i> Houghton, J., (2009) <i>Global Warming: The Complete Briefing</i> (4th ed.) Burroughs, W.J., (2007) <i>Climate Change: A Multidisciplinary Approach</i> (2nd ed.)	
<b>Assessment</b>	Examination: 60%; Coursework: 40% (Essay)	
<b>Staffing</b>	<b>Professor Edward Hanna</b> , Dr Julie Jones	



## GEO356 Geographical Research Project

<b>Level</b>	3
<b>Credits</b>	40
<b>Availability</b>	Core for BA Geography; BSc Geography Approved for BA Geography and Planning Not available to Environmental Science
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO266 or GEO264

### Description

This module requires the student to prepare, organise, research and report a piece of original work on a geographical topic. The student will decide on the topic and will either be expected to collect original material in order to investigate it, or to perform secondary analysis on information drawn from existing sources. The finished product is presented in the style, and at the length, associated with academic journal articles.

### Aims

- To give students the experience of carrying out an original research project under supervision.
- To enable students to put into practice the skills of information collection, analysis and presentation gained at levels 1 and 2 of their degree programme.

### Learning Outcomes




By the end of the module, a student will be able to demonstrate:

- The ability to conceptualise a clear research question arising from key academic debates in the field under investigation. Competently handle, statistically manipulate and interpret data in the real world.
- The ability to design and carry out a programme of research, involving the collation and analysis of either original or secondary data, appropriate to answering the research question under investigation.
- The ability to analyse research data competently and appropriately.
- The ability to write a substantial research report, summarising relevant literature, methodology, and results.

### Outline Contents

Initial work for this module will have been carried out in the module GEO264 or GEO266 which is the pre-requisite for GEO356. At the end of level 2 students will have identified and done preliminary project design work on their research topic for GEO356.

Students are expected to spend a suitable proportion of the vacation between levels 2 and 3 collecting the information necessary for their research project. During their first semester at level 3 students will work on the analysis of their information and on the presentation of their results, with a limited amount of advice from an individual supervisor.

<b>Delivery Methods</b>	Lectures (1 hr); Tutorials (5 hrs); Workshops (6 hrs); Supervision (as required – a minimum of 5 hrs is recommended)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 17 hrs; Independent: 383 hrs	
<b>Supporting Texts</b>	None	
<b>Assessment</b>	Coursework: 100% (Dissertation)	
<b>Staffing</b>	BA Geography and BA Geography and Planning: <b>Prof Peter Jackson</b> BSc Geography: <b>Dr Felix Ng</b>	

## GEO358 Geography of Europe Field Class

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Core for BA Geography (as part of choice of GEO358, GEO364 and GEO367); Approved for BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO264 or equivalent (as approved by the module convenor)
<b>Size Limits</b>	25 students

### Description

The study of social geographical issues in Europe is enhanced by experience of field research, and by the examination of particular problem topics in situ. Students taking this module will consider various topics (such as gentrification, ethnic minority segregation, housing developments, or issues in the use of public space) through field investigation. The actual topics chosen will depend on the location of the field class. Work for the module involves the development of group projects, with students working in teams. These projects necessitate both quantitative and qualitative skills. Students taking the module will therefore have the opportunity to enhance a number of their transferable skills, including oral presentation.

### Aims

This unit aims to provide a high-quality fieldwork experience relating to contemporary human geographical issues within Europe, enabling students to enhance both their substantive knowledge and understanding, and their transferable skills.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate:




- Their abilities in field research in a European context.
- Their understanding of the importance of local context in influencing the outcomes of large scale geographical processes within Europe.
- The development of their skills in teamwork, oral presentation and research reporting.

### Outline Contents

There will be lectures and group workshops prior to the field class introducing the issues relevant to the field site.

### Module costs

For core modules, all fieldclass costs are covered by the tuition fee. For this module, this applies to BA Geography students only. For other students, see 'Additional Costs' below.

<b>Delivery Methods</b>	Lectures (12 hrs); Seminars (2 hrs); Practicals (7 hrs); Fieldwork (64 hrs); Presentations (10 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 95 hrs; Independent: 105 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Coursework: 40% (Essay); 30% (Oral presentation); 30% (Website)	
<b>Staffing</b>	<b>Dr Dimitris Ballas</b> , Dr Desiree Fields	
<b>Additional Costs</b>	For academic year 2014/15, BSc Geography students will be required to pay the full fieldclass cost less a departmental discount. Students on other courses will be required to pay the full fieldclass cost.	

## GEO360 Geographies of Consumption

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO241 plus any two of GEO217, GEO242, GEO243

### Description

The ways in which we buy and use stuff and services are inextricable from the shaping of both our everyday lives and of contemporary societies. From constructions of identity and models of human wellbeing to issues of social equality and environmental sustainability, debates around consumption illuminate critical perspectives on contemporary societies and cultures. This module explores key contemporary geographical perspectives on consumption, linking critical insights and theoretical perspectives to our own practices and experiences.

### Aims




This unit aims to:

- Introduce students to some of the key geographical debates in consumption.
- To encourage students to engage with this research in a critical manner.
- To explore how recent work involves different understandings of spatiality.

### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- A sound critical awareness of the different traditions of research in geographies of consumption.
- An appreciation of how contrasting understandings of spatiality relate to work in the consumption field.

<b>Delivery Methods</b>	Lectures (20 hrs); Seminars (4 hrs); Workshops (10 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 34 hrs; Independent: 166 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Examination: 50%; Coursework: 50% (Essay)	
<b>Staffing</b>	<b>Dr Matt Watson</b>	

## GEO362 GIS and the Environment

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO210

### Description

Environmental scientists are involved in the monitoring, modelling and management of environmental systems. Spatial data in digital form and computer systems capable of handling them are becoming vital tools in all three activities. This module will introduce students who are already familiar with the basics of Geographic Information Systems to the advanced techniques required for the successful collection and analysis of spatial data for environmental applications. The module will consider the role of GIS in environmental science and also introduce students to some of the ethical and policy issues related to data collection and dissemination.

### Aims

- To introduce students to a range of advanced GIS techniques for the collection and analysis of spatial data for environmental applications.
- To encourage students to think critically about the role of GIS in environmental management.
- To consider some of the political and ethical issues relating to the use of spatial data in computer form.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- Knowledge of a range of advanced techniques for handling spatial data relating to the environment.
- An appreciation of the role of GIS in monitoring, modelling and managing the environment.
- Knowledge of some of the policy issues relating to the use of spatial data and GIS in environmental management.

### Outline Contents

- Overview of GIS in Environmental Science.
- Data sources.
- Data input and storage.
- Data integration.
- GIS in environmental monitoring.
- GIS in environmental modelling.
- GIS in environmental management.

<b>Delivery Methods</b>	Lectures (14 hrs); Seminars (4 hrs); Practical classes (10 hrs); Fieldwork (4 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 32 hrs; Independent: 168 hrs	
<b>Supporting Texts</b>	Wise, S. M. (2013) <i>GIS Fundamentals</i> , 2 <sup>nd</sup> edition	
<b>Assessment</b>	Examination: 67%; Coursework: 33% (Essay)	
<b>Staffing</b>	<b>Mr Steve Wise</b> , Dr Dimitris Ballas	
<b>Additional Costs</b>	There are no costs associated with fieldwork for this module.	

## GEO364 Urban Field Class

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Core for BA Geography (as part of choice of GEO358, GEO364 and GEO367); Approved for BSc Geography; BA Geography & Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO241, GEO242 or GEO243
<b>Size Limit</b>	25 Students

### Description

This course examines the historical and cultural development of a global city, and the wide ranging implications this has had for our understanding of twentieth century-urbanism. Three main themes are explored in this context: architecture, space and power; the city practice and material culture; identity and difference. The course will involve a field class in a global city, which will require students to undertake designated field excursions to contrasting districts, landmark sites, museums, galleries and key archives. The fieldwork will involve the use of a range of qualitative research techniques and interpretative methods and will build on the students' own areas of interest.

### Aims

- To critically examine the historical and cultural development of a global city and its relationship to dominant explanations of twentieth century urbanism.
- To enhance an understanding of the relationships between: architecture, space and power; artistic practice and the city; identity and difference.
- To develop qualitative techniques and interpretative methods through the completion of a variety of fieldwork activities.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- A critical awareness of the historical and cultural development of a global city and its relationship to dominant explanations of twentieth-century urbanism.
- An understanding of the relationships between: architecture, space and power; artistic practice and the city; urban ethnicity and social segregation.
- A range of qualitative fieldwork techniques and interpretative methods.

### Module costs

For core modules, all fieldclass costs are covered by the tuition fee. For this module, this applies to BA Geography students only. For other students, see 'Additional Costs' below.

<b>Delivery Methods</b>	Lectures (20 hrs); Seminars (6 hrs); Tutorials (7 hrs); Practical classes (5 hrs); Fieldwork (40 hrs); Workshops (10 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 88 hrs; Independent: 112 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Coursework: 85% (Research Project); 15% (Oral presentation)	
<b>Staffing</b>	<b>Dr Jessica Dubow</b> , Dr Eric Olund, Professor Richard Phillips	
<b>Additional Costs</b>	For academic year 2014/15, BSc Geography students will be required to pay the full fieldclass cost less a departmental discount. Students on other courses will be required to pay the full fieldclass cost.	

## GEO365 Dryland Environments Field Class

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BSc Geography; Environmental Science; BA Geography; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO244 or GEO234 or GEO233 or GEO206
<b>Size Limit</b>	30 students

### Description

This module will allow students to work within a unique range of dryland aeolian and fluvial process domains and undertake work culminating in the design, implementation and production of a report based primarily on student-led fieldwork; but also including some follow-up laboratory work. Introductory sessions and project design will take place in Sheffield prior to the field visit. The field class itself will include a range of field-based environmental introductions, group and individual student field data collection and analysis, and student-centred research presentations. Follow-up work in Sheffield will include laboratory and data analysis as necessary, individual student project write-ups, and a final module overview session.

### Aims

- Provide an introduction to the nature of dryland environments and the processes that shape them, including human interactions.
- Provide direct experience of one dryland environment.
- Provide advanced instruction in project design, implementation and presentation.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- Knowledge of the physical characteristics, processes, geomorphology and human environment links in one dryland region.
- The ability to plan and undertake a project to investigate environmental processes in a dryland environment.
- An in-depth understanding of the operation of at least one major environmental process in drylands through fieldwork, data analysis and interpretation through group and individual learning.
- Presentation skills commensurate with the need to communicate detailed research findings.

### Outline Contents

- Introduction and project selection in Sheffield.
- Introduction to field area and inquiry-based learning; group project work in field and in classroom.
- Group presentations of findings.

<b>Delivery Methods</b>	Lectures (3 hrs); Seminars (14 hrs); Practical class (1 hr); Fieldwork (90 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 108 hrs; Independent: 92 hrs	
<b>Supporting Texts</b>	Parsons, A.J. and Abrahams, A.D. (eds.) (2nd edition, 2009). <i>Geomorphology of Desert Environments</i> Thomas, D.S.G. ed. (3rd edition, 2011). <i>Arid Zone Geomorphology – Process, Form and Change in Drylands</i>	
<b>Assessment</b>	Coursework: 50% (Project Report); 20% (Reflexive Report); 30% (Group Presentation in the field)	
<b>Staffing</b>	<b>Dr Rob Bryant</b> , Mr Rob Ashurst, Professor Mark Bateman	
<b>Additional Costs</b>	For academic year 2014/15, BSc Geography students will be required to pay the full fieldclass cost less a departmental discount. Students on other courses will be required to pay the full fieldclass cost.	

## GEO367 Geographies of Development Field Class

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Core for BA Geography (as part of choice of GEO358, GEO364 and GEO367); Approved for BSc Geography; Environmental Science; BA Geography & Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO221 plus one of GEO266, GEO267
<b>Size Limit</b>	30 students

### Description

This module critically examines contemporary development discourse and practise by providing students with the opportunity to explore and research development issues in the field and to enhance their understanding of grass-roots outcomes with reference to a particular developing country. The module will build on research skills to produce methodologies suited to development research that students will implement through fieldwork projects. The module contributes to students' transferable skills through teamwork, research design and implementation and through presentation skills.

N.B.: For BA Geography students under the new fee regime and for whom this is their only/first-choice fieldtrip, costs of transport, accommodation, insurance, and some meals are covered. These students will still need to pay for some meals plus drinks and bottled water during the trip: these costs are unlikely to exceed £70.

For non-BA Geography students, or BA Geography students on the old fees system or for whom this fieldtrip is a second fieldtrip, there is a cost of £800 for travel expenses in addition to the costs noted above for food and water.

### Aims

- To provide students with substantive knowledge and understanding of geographies of development (with emphasis placed on grass-roots perspectives).
- Enhance their transferable skills through in-depth, high quality field research in a developing country.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- A clear knowledge and understanding of contemporary issues and debates in development geographies.
- An understanding of the importance of bottom-up, grassroots understandings of contemporary development issues.
- Both generic and more specific development-research focused fieldwork skills.
- Skills in group work, report writing and oral presentation.

### Module costs

For core modules, all fieldclass costs are covered by the tuition fee. For this module, this applies to BA Geography students only. For other students, see 'Additional Costs' below.

<b>Delivery Methods</b>	Lectures (20 hrs); Fieldwork (90 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 110 hrs; Independent: 90 hrs	
<b>Supporting Texts</b>	Desai, V., and Potter, R. (eds.) (2006) <i>Doing Development Research</i>	
<b>Assessment</b>	Coursework: 60% (Individual Report); 20% (Reflexive essay); 20% (Group Presentation)	
<b>Staffing</b>	<b>Dr Daniel Hammett</b> , Dr Dan Vickers, Dr Seth Schindler, Dr Lucy Jackson	
<b>Additional Costs</b>	For academic year 2014/15, BSc Geography students will be required to pay the full fieldclass cost less a departmental discount. Students on other courses will be required to pay the full fieldclass cost.	

## GEO368 Planetary Geoscience

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; Environmental Science
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO206 or GEO233 or GEO234 or GEO244

### Description

This module introduces the student to the fascinating discipline of planetary geoscience and exploration. By using the principles of Physical Geography to study unfamiliar environments, we will explore problems that touch upon themes from climate, tectonics, geomorphology, hydrology, and life. The module begins with the Solar System but soon focuses on planetary-scale matters, using the terrestrial planets (Mercury, Venus, Earth, and Mars) as main examples because of an explosion of knowledge gathered from their observation. We will consider the new perspectives which such knowledge offers on the Earth's dynamic systems.

### Aims

- Introduce the fundamental elements of solar system science.
- Show how a physical-systems approach has been applied to other planetary contexts beyond Earth.
- Illustrate how comparative studies widen and enrich our perspective on geoscience.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate:

- An understanding of historical and current issues of planetary geoscience and exploration.
- Core knowledge of planetary environments and of factors influencing their development.
- An ability to use this knowledge to engage with research problems in this discipline.
- An appreciation of the importance of multi-disciplinary investigations in pushing forward frontiers of knowledge.

### Outline Contents

- Solar System: Origin and components.
- Comparative planetology.
- Planetary climates.
- Surface and interior processes.
- Close encounters: the Moon, Venus, Mars.
- Volcanism.
- Life in the Solar System.
- Ice in the solar system.
- Planetary exploration.

<b>Delivery Methods</b>	Lectures (23 hrs); Seminars (6 hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 29 hrs; Independent: 171 hrs	
<b>Supporting Texts</b>	Beatty, J.K., et al (eds.) (1999) <i>The New Solar System</i> , McBride, N. and Gilmour, I. (2005) <i>An Introduction to the Solar System</i>	
<b>Assessment</b>	Examination: 60%; Coursework: 40% (Essay)	
<b>Staffing</b>	<b>Dr Felix Ng</b> , Dr Andrew McGonigle	



## GEO369 Social and Spatial Inequalities

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography and Planning
<b>Semester</b>	Autumn
<b>Prerequisites</b>	GEO242

### Description

This module will provide students with an opportunity to learn about and experience the social fabric of modern Britain and how this varies both socially and spatially. The module will give students understanding and experience of the importance of social situation and place in shaping lives. The module consists of lectures and seminars plus self-guided fieldwork within Sheffield.

### Aims

- This module aims to interest, enthuse and motivate students in the study of social and spatial inequalities.
- Students will understand how societal structures, situation and geographic location impact on work, home and leisure.
- Give the students the opportunity to relate what they have learnt to the real world through fieldwork.




### Learning Outcomes

By the end of the module, a student will be able to demonstrate the ability to:

- Outline the importance of geography in relation to social inequality.
- Demonstrate an understanding of how policies and issues impact upon different groups within society.
- Judge and evaluate evidence and develop a reasoned argument.
- Carry out and present own observations and findings.

### Outline Contents

- The distribution of wealth.
- What is social inequality?
- Living on the wrong side of the street.
- Social mobility and opportunity.
- Spatial mobility and inequality.
- How does place dictate life chances.
- Policies for reducing inequality.
- Group project covering themes such as: education, employment, housing, transport, access to services and food, environment and open space, crime and community safety, income and wealth.

<b>Delivery Methods</b>	Lectures (15 hrs); Seminars (5 hrs); Tutorials (3 hrs); Practical classes (10 hrs); Fieldwork (40 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 73 hrs, Independent: 127 hrs	
<b>Supporting Texts</b>	Butler, T. and Watt, P. (2007). <i>Understanding Social Inequality</i> Dorling et al, (2007). <i>Poverty, wealth and place in Britain, 1968 to 2005</i> Dorling, D. (2010). <i>Injustice: Why Social Inequality Persists</i> Thomas, B. et al. (2009). <i>A Tale of Two Cities: The Sheffield Project</i>	
<b>Assessment</b>	Examination: 34%; Coursework: 33% (Report); 33% (Presentation)	
<b>Staffing</b>	<b>Dr Dan Vickers</b> , Dr Desiree Fields	
<b>Additional Costs</b>	There are no costs associated with fieldwork for this module.	

## GEO375 Cities and Modernities

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BA Geography; BSc Geography; BA Geography and Planning
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO241 and GEO265 (or other modules at the convenor's discretion)

### Description

The links between social conflict and cultural production in modern cities have long fascinated scholars, and recent scholarship has been marked by a renewed interest in the embodied experience of these aspects of urban life as sensory perceptions, aesthetic judgements and power relations. This module will draw from cultural, social, historical and political geographies as well as other disciplines to engage with the shifting nature and spatiality of these relationships, both through theoretical debates and through case studies of selected cities. Key topics will include urbanisation, cultural difference, social stratification, representational practices and bodily experiences of modern cities.

### Aims





This module aims to:

- Explore the contribution that geographers have made towards a critical understanding of urban society and culture.
- Examine the social, political and cultural dimensions of urbanisation and urbanism.
- Develop skills in critical and qualitative geography.

### Learning Outcomes

By the end of the module, a student will be able to:

- Engage critically with the contributions made by geographers and other scholars to the understanding of urban society and culture.
- Understand the changing relationship between social conflict, cultural production and urban experience.
- Evaluate theoretical explanations of urban modernity.
- Demonstrate skills in critical and qualitative geography.

<b>Delivery Methods</b>	Lectures (20 hrs); Fieldwork (6 hrs); Workshops (2 hrs)	<b>Skills</b>
<b>Learning Hours</b>	Scheduled: 28 hrs; Independent: 172 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Examination: 67%; Coursework: 33% (Group Project)	
<b>Staffing</b>	<b>Dr Eric Olund</b> , Dr Jessica Dubow	
<b>Additional Costs</b>	There are no costs associated with fieldwork for this module.	

## GEO377 Western Ireland Fieldclass

<b>Level</b>	3
<b>Credits</b>	20
<b>Availability</b>	Approved for BSc Geography; BA Geography; BA Geography and Planning Not available to Environmental Science
<b>Semester</b>	Spring
<b>Prerequisites</b>	GEO206 or GEO233 or GEO234 or GEO244

### Description

The module provides practical field experience in a range of processes and techniques in Physical Geography. It will be focussed around a fieldtrip in Galway, western Ireland and will consider a variety of topics in Physical Geography, such as: glacial and karst geomorphology, geology, hydrology, biogeography, paleoecology, ecosystem dynamics, and human impacts on the landscape. The topics will complement and add to teaching across the BSc Physical Geography programme and will give students the opportunity to gain a deeper understanding of these topics and extend their field research skills in a new and exciting environment. Following introductory sessions and lectures in Sheffield, the field class will include field-based environmental interpretations, group and individual student field data collection and analysis, and group student research presentations. Follow-up work in Sheffield will include laboratory and data analysis as necessary and individual student project write-ups.

### Aims




This unit aims to:

- Exemplify and expand knowledge of environment and human-environment links, through investigation of the western Ireland landscape.
- Provide students with an understanding of how different processes interact over spatial and temporal scales to shape the landscape.
- Develop field techniques and skills in research design, data interpretation, data presentation and individual and group learning.

### Learning outcomes

By the end of the module a student will be able demonstrate:

- An in-depth understanding of the operation of at least one major environmental process in western Ireland.
- An enhanced understanding of how different environmental processes interact to shape the landscape.
- The ability to collect and analyse field data in group and individual contexts.
- Oral and written presentational skills commensurate with the need to communicate detailed research findings.

<b>Delivery Methods</b>	Lectures (4hr); Seminars (2hr); Practicals (4hr); Fieldwork (70hrs)	<b>Skills</b>   
<b>Learning Hours</b>	Scheduled: 80 hrs; Independent: 120 hrs	
<b>Supporting Texts</b>	No specific text	
<b>Assessment</b>	Coursework: 60% (Reflexive report); 20% (Presentations); 20% (Field Notebook)	
<b>Staffing</b>	<b>Dr Andrew Sole</b> , Dr Gunnar Mallon	
<b>Additional Costs</b>	For academic year 2014/15, BSc Geography students will be required to pay the full fieldclass cost less a departmental discount. Students on other courses will be required to pay the full fieldclass cost.	



# DEGREE PROGRAMMES

## BA SINGLE HONOURS GEOGRAPHY (L700) GEOU04

### YEAR 1

#### Core modules: 70 credits

- IPS101 The State of Sheffield, Global Perspectives on Local Issues (not credit-bearing)
- GEO103 Region, Nation and World
- GEO112 Introducing Social and Cultural Geographies
- GEO151 Qualitative Methods in Human Geography
- GEO152 Statistical Data Analysis in Geography
- GEO163 Information and Communication Skills for Geographers
- GEO165 New Horizons in Geography
- GEO167 Geospatial Technologies

#### Optional modules: 50 credits

Approved modules from BSc Geography or unrestricted modules from other disciplines.

Approved Geography modules:

- GEO101 Physical Systems at the Global Scale
- GEO108 Earth's Changing Surface
- GEO150 Practical Methods for Physical Geography
- GEO164 Understanding and Managing Environmental Issues
- GEO166 Earth's Evolution

### YEAR 2

#### Core modules: 20 credits

- GEO223 Philosophical Issues in Human Geography
- GEO264 Research Design in Human Geography

#### Optional modules: 100 credits

Two modules from the following (20 credits):

- GEO210 Geographic Information Systems
- GEO231 Socio-spatial Analysis
- GEO265 Researching Human Geographies

Two modules from the following modules/module combinations (40 credits):

- GEO241 Social and Cultural Geographies
- GEO242 Health, Place and Society
- GEO243 Political Geographies
- GEO217 Environment, Policy and Society & GEO221 Geographies of Development

Optional modules not taken above, approved modules from BSc Geography, or unrestricted modules from other disciplines (40 credits).

Approved BSc Geography modules (choice of 110 credits):

- GEO206 Environmental Change
- GEO233 Glacial Environments
- GEO234 Atmospheres and Oceans
- GEO244 Earth and Ecosystem Dynamics
- GEO266 Research Skills for Physical Geography†

- GEO267 Research Design in Physical Geography†

† *GEO266 & GEO267 cannot be taken together*

### **YEAR 3**

#### **Compulsory modules: 40 credits**

- GEO356 Geographical Research Project

#### **Optional Modules: 80 credits**

Three modules from the following (60 credits):

- GEO302 Extended Geographical Essay
- GEO323 Social Geography of Europe
- GEO327 Geography of Elections
- GEO336 Development and Global Change
- GEO345 Glacial and Periglacial Geomorphology
- GEO352 Natural Hazards
- GEO354 Contemporary Climate Change and Processes
- GEO358 Geography of Europe Field Class
- GEO360 Geographies of Consumption
- GEO361 GIS in the Social Sciences
- GEO362 GIS and the Environment
- GEO364 Urban Field Class
- GEO365 Dryland Environments Field Class
- GEO367 Development Geographies Field Class
- GEO368 Planetary Geoscience
- GEO369 Social and Spatial Inequalities
- GEO375 Cities and Modernities
- GEO377 Western Ireland Field Class

Optional modules not taken above or unrestricted modules from other disciplines (20 credits).

# **BSC SINGLE HONOURS GEOGRAPHY (F800) GEOU202**

## **YEAR 1**

### **Core modules: 70 credits**

- IPS101 The State of Sheffield, Global Perspectives on Local Issues (not credit-bearing)
- GEO101 Physical Systems at the Global Scale
- GEO108 Earth's Changing Surface
- GEO150 Practical Methods for Physical Geography
- GEO152 Statistical Data Analysis in Geography
- GEO163 Information and Communication Skills for Geographers
- GEO165 New Horizons in Geography
- GEO167 Geospatial Technologies

### **Optional modules: 50 credits**

Approved modules from BA Geography or unrestricted modules from other disciplines.

Approved Geography modules (choice of 40 credits):

- GEO103 Region, Nation and World
- GEO112 Introducing Social and Cultural Geographies
- GEO151 Qualitative Methods in Human Geography
- GEO164 Understanding and Managing Environmental Issues
- GEO166 Earth's Evolution

## **YEAR 2**

### **Core module: 20 credits**

- GEO266 Research Skills for Physical Geography

### **Optional modules: 100 credits**

Two modules from the following (20 credits):

- GEO210 Geographic Information Systems
- GEO211 Applied Remote Sensing
- GEO231 Socio-spatial Analysis

Two modules from the following (40 credits):

- GEO206 Environmental Change
- GEO233 Glacial Environments
- GEO234 Atmospheres and Oceans
- GEO244 Earth and Ecosystem Dynamics

Optional modules not taken above, approved modules from BA Geography, or unrestricted modules from other disciplines (40 credits).

Approved BA Geography modules (choice of 110 credits):

- GEO241 Social and Cultural Geographies
- GEO242 Health, Place and Society
- GEO243 Political Geographies
- GEO217 Environment, Policy and Society & GEO221 Geographies of Development

## **YEAR 3**

### **Compulsory modules 40 credits**

- GEO356 Geographical Research Project

### **Optional Modules: 80 credits**

Three modules from the following (60 credits):

- GEO302 Extended Geographical Essay
- GEO323 Social Geography of Europe
- GEO327 Geography of Elections
- GEO336 Development and Global Change
- GEO345 Glacial and Periglacial Geomorphology
- GEO352 Natural Hazards
- GEO354 Contemporary Climate Change and Processes
- GEO358 Geography of Europe Field Class
- GEO360 Geographies of Consumption
- GEO361 GIS in the Social Sciences
- GEO362 GIS and the Environment
- GEO364 Urban Field Class
- GEO365 Dryland Environments Field Class
- GEO367 Development Geographies Field Class
- GEO368 Planetary Geoscience
- GEO369 Social and Spatial Inequalities
- GEO375 Cities and Modernities
- GEO377 Western Ireland Field Class

Optional modules not taken above or unrestricted modules from other disciplines (20 credits).



# BSC HONOURS ENVIRONMENTAL SCIENCE (F900) GEOU211

## YEAR 1

### Core modules: 90 credits

- IPS101 The State of Sheffield, Global Perspectives on Local Issues (not credit-bearing)
- APS118 Practical Skills in Biology
- APS121 Evolution
- APS122 Biodiversity
- APS124 Ecosystems and Environmental Change
- GEO101 Physical Systems at the Global Scale
- GEO108 Earth's Changing Surface
- GEO154 Geoenvironmental Field Skills
- GEO163 Information and Communication Skills for Geographers
- GEO167 Geospatial Technologies

### Optional Modules: 30 credits

Approved modules from the list below (with the approval of the Course Director you may substitute one of the approved modules for a 10 credit unrestricted module from any discipline)

- APS119 Comparative Physiology
- APS120 Reproduction, Development and Growth
- APS123 Population and Community Ecology
- APS126 Behaviour of Humans and Other Animals
- APS131 Ecological Identification Skills
- GEO150 Practical Methods for Physical Geography
- GEO164 Understanding and Managing Environmental Issues
- GEO165 New Horizons in Geography
- GEO166 Earth's Evolution

## YEAR 2

### Core modules: 40 credits

- APS222 Animal and Plant Science Tutorials
- APS240 Data Analysis
- APS246 Plant Habitat and Distribution
- APS255 Environmental Interpretation Field Course

### Optional modules and pathways

Approved modules as listed below for your chosen pathway (with the approval you may substitute one of the approved modules for a 10 credit unrestricted module from any discipline)

#### ***General Pathway: 80 credits***

APS216 (10 credits), APS223 (10), APS269 (10), APS271 (10), APS273 (20), APS276 (10), GEO206 (20), GEO210 (10), GEO211 (10), GEO221 (10), GEO233 (20), GEO234 (20), GEO244 (20), GEO267 (10)

#### ***Global Environmental Change Pathway: 80 credits***

APS216 (10 credits) and one of GEO206 (20) or GEO234 (20)

Plus 50 credits of modules not taken above from General Pathway

#### ***Environmental Biosciences Pathway: 80 credits***

APS223 (10 credits), APS265 (5), APS276 (10), GEO206 (20) and one of APS262 (5) or APS266 (5)

Plus 30 credits of modules not taken above from General Pathway

***Environmental Geosciences Pathway: 80 credits***

GEO210 (10 credits), GEO211 (10) and one of GEO234 (20) or GEO244 (10)

Plus 40 credits of modules not taken above from General Pathway

**YEAR 3****Core module: 10 credits**

- APS332 Issues in Environmental Science

**Core module choice: 20 credits**

One module from the following (20 credits):

- APS330 Project
- GEO347 Geo-Environmental Project

**Optional modules**

Approved modules as listed below for your chosen pathway (with the approval you may substitute one of the approved modules for a 10 credit unrestricted module from any discipline)

***General Pathway: 90 credits***

APS308 (10 credits), APS313 (10), APS325 (10), APS326 (10), APS341 (10), APS342 (10), APS346 (10), APS348 (10), APS349 (10), GEO345 (20), GEO352 (20), GEO354 (10), GEO362 (10), GEO365 (10), GEO367 (20), GEO368 (20)

***Global Environmental Change Pathway: 90 credits***

APS313 (10 credits), APS348 (10), GEO354 (20) and either GEO206 (20) or GEO234 (20) – whichever not previously taken at Level 2

Plus 30 credits of modules not taken above from General Pathway

***Environmental Biosciences Pathway: 90 credits***

APS308 (10 credits), APS313 (10), APS346 (10), APS348 (10)

Plus 50 credits of modules not taken above from General Pathway

***Environmental Geosciences Pathway: 90 credits***

GEO352 (20 credits), GEO368 (20)

Plus 50 credits of modules not taken above from General Pathway

# **MENVSCI MASTERS IN ENVIRONMENTAL SCIENCE (F902)**

## **GEOU210**

### **YEAR 1**

- See BSc Honours Environmental Science

### **YEAR 2**

- See BSc Honours Environmental Science

### **YEAR 3**

- See BSc Honours Environmental Science

### **YEAR 4**

#### **Core modules: 20 credits**

- APS405 Advanced Biological Analysis
- APS407 Research and Study Skills in Biology

#### **Optional modules: 100 credits**

- GEO402 Current Issues in Environmental Sciences
- GEO404 Masters Research Project
- GEO405 Critical Papers Review

or

- APS402 Research Dissertation
- APS404 Advanced Trends in Biology
- APS406 Research Project

# **BA DUAL HONOURS GEOGRAPHY & PLANNING (LK74) TRPU107**

## **YEAR 1**

Compulsory Geography modules (40 credits):

- IPS101 The State of Sheffield, Global Perspectives on Local Issues (not credit-bearing)
- GEO103 Region, Nation and World
- GEO112 Introducing Social and Cultural Geographies
- GEO152 Statistical Data Analysis in Geography
- GEO163 Information and Communication Skills for Geographers

Compulsory Planning modules (40 credits).

Unrestricted modules from any discipline (40 credits).

## **YEAR 2**

Choice of two Geography modules (40 credits):

- GEO217 Environment, Policy and Society & GEO221 Geographies of Development
- GEO241 Social and Cultural Geographies
- GEO242 Health, Place and Society
- GEO243 Political Geographies

Compulsory Planning modules (40 credits).

Unrestricted modules from any discipline (40 credits).

## **YEAR 3**

Compulsory Planning modules (40 credits).

Choice of three Geography modules (60 credits):

- GEO302 Extended Geographical Essay
- GEO323 Social Geography of Europe
- GEO327 Geography of Elections
- GEO336 Development and Global Change
- GEO345 Glacial and Periglacial Geomorphology
- GEO352 Natural Hazards
- GEO354 Contemporary Climate Change and Processes
- GEO358 Geography of Europe Field Class
- GEO360 Geographies of Consumption
- GEO361 GIS in the Social Sciences
- GEO362 GIS and the Environment
- GEO364 Urban Field Class
- GEO365 Dryland Environments Field Class
- GEO367 Development Geographies Field Class
- GEO368 Planetary Geoscience
- GEO369 Social and Spatial Inequalities
- GEO375 Cities and Modernities
- GEO377 Western Ireland Field Class

Unrestricted modules from any discipline (20 credits).

## MODULE PATHWAYS LEADING TO LEVEL 3 MODULES

Level 2 Pre- and Co-requisites	Level 1 Pre- and Co-requisites
GEO302 Extended Geographical Essay	
GEO266	GEO101, GEO108 and GEO150
<i>or</i>	
GEO223 and GEO264	GEO103, GEO112, GEO151 and GEO152
GEO323 Social Geography of Europe	
GEO242	GEO103
<i>or</i>	
GEO243	GEO103 or GEO112
GEO327 Geography of Elections	
GEO243	GEO103 or GEO112
GEO336 Development and Global Change	
GEO217 or GEO221	GEO103 or GEO112
GEO345 Glacial & Periglacial Geomorphology	
GEO206 or GEO233	GEO101 and GEO108
GEO347 Geo-Environmental Project	
None	None
GEO352 Natural Hazards	
None	GEO101
GEO354 Contemporary Climate Change and Processes	
None	None
GEO356 Geographical Research Project	
GEO266	GEO101, GEO108 and GEO150
<i>or</i>	
GEO264	GEO103, GEO112, GEO151 and GEO152
GEO358 Geography of Europe Field Class	
GEO264 or equivalent	GEO103, GEO112, GEO151 and GEO152
GEO360 Geographies of Consumption	
GEO241	GEO112
<i>plus any two from the following:</i>	
GEO217, GEO242, GEO243	GEO103 or GEO112
GEO361 GIS and the Social Sciences	
GEO210	GEO161 (discontinued) or GEO167
<i>or</i>	
GEO231	GEO152
GEO362 GIS and the Environment	
GEO210	GEO161 (discontinued) or GEO167
GEO364 Urban Field Class	
GEO241	GEO112
<i>or</i>	
GEO242	GEO103
<i>or</i>	
GEO243	GEO103 or GEO112

GEO365 Drylands Environment Field Class	
GEO244 or GEO232 (discontinued)	GEO101 and GEO108
GEO367 Development Geographies Field Class	
GEO221 and GEO266	GEO101, GEO108 and GEO150 and either GEO103 or GEO112
<i>or</i>	
GEO221 and GEO263 (discontinued)	GEO150 and either GEO103 or GEO112
<i>or</i>	
GEO221 and GEO264	Either GEO103 or GEO112 and either GEO151 or GEO152
GEO368 Planetary Geoscience	
GEO206 or GEO232 or GEO233	GEO101 and GEO108
<i>or</i>	
GEO234	GEO101
GEO369 Social and Spatial Inequalities	
GEO242	GEO103
GEO375 Cities and Modernities	
GEO241 and GEO265	GEO112, GEO151 and GEO152
GEO377 Western Ireland Fieldclass	
GEO206 or GEO233 or GEO244	GEO101 and GEO108
<i>or</i>	
GEO234	GEO101