



The range of modules available in this department spans all areas of the subject, from human geography to physical science.

Geography: Level 4 modules provides a foundation in human and physical geography. A wide range of key transferable skills will be developed, including geographical information systems (GIS). Students gain an understanding of the Earth, its environments, and the global concerns of humanity.

At level 5, research, evaluative and practical skills are developed through field trips at home and overseas. More specialized modules are offered in human and physical geography.

Level 6 modules are more specialized & cover key issues such as the impact of climate change & urban geographies.

Environmental Science: Level 4 modules introduce key concepts in environmental science, including methods of scientific investigation. Students study the processes that operate within environmental systems and cause change and gain an understanding of the ways people interact with the environment and examine sustainability challenges for the future.

Level 5 builds knowledge of environmental systems and analytical science. Skills are developed through the analysis of environmental data, and students develop a practical understanding of techniques for investigating our environment.

Level 6 modules are advanced and continue on from level 5 study, enabling students to apply their knowledge to investigate contemporary environmental challenges.

Updated May 2024/PJW

Entry requirements: GPA of 2.75 or above (out of 4.0) or equivalent.

Pre-requisites:

- **Level 4:** prior introductory university-level study of geography or environmental studies is very useful.
- **Level 5:** prior study of geography/environmental science is required (at level 4 or equivalent).
- **Level 6:** substantial prior study of geography/environmental science is required.
- **For levels 5 and 6,** any specific pre-requisites for individual modules will be detailed in each module description.

Taught at: Penrhyn Road campus

Notes:

1. All modules are at undergraduate level only.
2. Students enrolled on Study Option 1 are required to study the entire module over both semesters.
3. Whilst the University makes every effort to ensure that this information is correct at the time of updating (May 2024), it cannot accept responsibility for omissions or subsequent changes. Module availability and content may be subject to change, as part of the University’s policy of continuous improvement and development.
4. Details of assessment for students enrolled on either Study Option 2 or 3 where provided are **indicative only** and may also be subject to change as part of the above policy.

KEY TO MODULE DESCRIPTORS
SUITABILITY OF MODULE FOR STUDENTS VISITING KU ON STUDY OPTION ____
1: Indicates module is suitable for students on Study Option 1 (Whole Year)
2: Indicates module is suitable for students on Study Option 2 (Autumn)
3: Indicates module is suitable for students on Study Option 3 (Spring)

Study Option 1 = Whole Year 2
 Study Option 2 = Autumn
 Study Option 3 = Spring

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**Geography and Environmental Science Modules for Visiting
Students 2024/25**

MODULE CODE	TITLE	SUITABILITY		
LEVEL 4 – INTRODUCTORY				
GG4001	Our Dynamic Earth	1	2	3
GG4002	Introduction to Environmental Science	1	2	3
GG4003	Digital Mapping	1	2	
GG4004	Research and Field Work Methods	1		3
GG4008	Introducing Human Geography	1	2	
LEVEL 5 – INTERMEDIATE				
GG5001	Advanced Research and Fieldwork and Methods	1	2	
GG5002	Geographical Theory and Practice	1	2	
GG5021	Rivers, Oceans and the Atmosphere	1	2	
GG5022	Understanding our World with GIS	1	2	
GG5023	Principles of Ecology and Conservation	1	2	
GG5024	Contaminated Land, Assessment and Remediation	1		3
GG5025	Capitalist Societies	1	2	
GG5026	Advanced Research Methods and Statistics	1		
GG5027	Cultural Geographies	1		3
GG5028	Geomorphology, Geotechnics and Geohazards	1		3
GG5045	Disasters, Society and Culture	1	2	
LEVEL 6 - ADVANCED				
GG6010	Urban Geographies	1	2	3
GG6020	Development Geographies	1	2	3
GG6030	Global Rural Geographies	1	2	3
GG6070	The Challenge of Climate Change	1	2	
GG6080	Land and Water Resources Management	1	2	3
GG6130	Disaster Management	1	2	3
GG6140	GIS: Transforming Geography and the Environment	1	2	

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

LEVEL 4 – INTRODUCTORY

Module Code	GG4001
Module Title	Our Dynamic Earth
Level	4
Prerequisites	None
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	<ul style="list-style-type: none"> • Study Abroad/International Exchange students for Study Options 1 or 2 or 3 • Not open to Erasmus students (as Level 4)
Content	<p>This module considers the Earth's various "spheres" - from the geosphere to the atmosphere with all that comes between. In addition to learning the scientific principles of the various mechanisms which drive movement and circulation in each sphere, the hazards associated with each, and the disasters that result, will be considered.</p> <p>➤ Autumn Semester Content:</p> <p>❖ Oceans, Atmosphere and Atmospheric Hazards</p> <ul style="list-style-type: none"> • Oceans and oceanic circulation • Atmosphere, atmospheric circulation and change • Severe weather: Storms, hurricanes and tornadoes • Severe weather - drought and wildfires <p>❖ The Hydrosphere and Hydrological Hazards</p> <ul style="list-style-type: none"> • Introduction and evaporation • Interception and infiltration • Groundwater and runoff <p>❖ The Solid Earth and Geophysical Hazards</p> <ul style="list-style-type: none"> • Earth's Formation & Internal Structure • The Rock Cycle & Geological Timescales • Plate Tectonics and Geological Structures • Seismic Hazards – Earthquakes • Seismic Hazards – Tsunamis • Volcanic Hazards

Study Option 1 = Whole Year 4
 Study Option 2 = Autumn
 Study Option 3 = Spring

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	<p>➤ Spring Semester Content:</p> <ul style="list-style-type: none"> ❖ <i>Geomorphology and Mass Movement Hazards</i> <ul style="list-style-type: none"> • Geological Control & Surface of the Earth • Introduction to Geomorphological Concepts & Geomorphological Landscapes • Geomorphological Landscapes & Mass Movement Hazards ❖ <i>The Pedosphere and Land Degradation</i> <ul style="list-style-type: none"> • Soil Development & Structures • Soil Characteristics • Soil Erosion and Land Degradation • Fieldtrip
Teaching	Lectures and practicals
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • Group poster presentation on volcano case study (30%) • Drainage basin exercise – 1,500 words plus graphics (30%) • 2-hr exam (40%)
	<p>Study Option 2:</p> <ul style="list-style-type: none"> • Group poster presentation on volcano case study (100%)
	<p>Study Option 3:</p> <ul style="list-style-type: none"> • Drainage basin exercise – 1,500 words plus graphics (100%)
Last updated	07/05/24 PJW

[Return to TOP](#)

Module Code	GG4002
Module Title	Introduction to Environmental Science
Level	4
Prerequisites	introductory university level geography and/or environment is useful.
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	<ul style="list-style-type: none"> • Study Abroad/International Exchange students for Study Options 1 or 2 or 3 • Not open to Erasmus students (as Level 4)
Content	<p>This module introduces the basic principles of environmental science, including environmental chemistry, water quality analysis/assessment, environmental pollution, and ecology. The module will investigate basic environmental principles to help students understand how physical and human processes can promote change in environmental systems at a range of spatial and temporal scales. Students will investigate the impacts of environmental change, understand their significance, and show how this knowledge can be applied to the management of environmental challenges. The importance of a holistic approach to problem solving in the environmental sciences will be introduced along with material on key underpinning scientific disciplines including environmental chemistry and ecology through the investigation of global habitats.</p> <p>➤ Autumn Semester content:</p> <p>❖ <i>Ecological Processes and the Biosphere</i></p> <ul style="list-style-type: none"> • Ecological processes • Evolutionary Change • Quaternary Change • Successional Change • Conservation 1: Short-term • Conservation 2: Long-term <p>➤ Spring Semester content:</p> <p>❖ <i>Environmental Chemistry:</i></p> <ul style="list-style-type: none"> • Atoms and molecules • Introduction to organic chemistry • Environmental pollution • Environmental lab practicals

GG4030 Continued	
Teaching	Lectures, practical sessions and fieldwork
Assessment	Study Option 1: <ul style="list-style-type: none"> • Exam (40%) • Sustainability report – 1,500 words (30%) • Environmental chemistry laboratory practical report (30%)
	Study Option 2: <ul style="list-style-type: none"> • Sustainability report – 1,500 words (100%)
	Study Option 3: <ul style="list-style-type: none"> • Sustainability report – 1,500 words (100%)
Last updated	07/05/24 PJW

[Return to TOP](#)

Module Code	GG4003
Module Title	Digital Mapping
Level	4
Prerequisites	Successful completion of introductory university level geography is useful
Credits	<ul style="list-style-type: none"> • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	<ul style="list-style-type: none"> • Note that this module is taught entirely within the autumn semester and is thus open for Study Options 1 or 2 • Not open to Erasmus students as level 4

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

7

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**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Content	<p>Maps are visual representations of our world that are created manually or specialist mapping programs. A wide variety of software now support mapping functionality, however amongst the most powerful are Geographical Information Systems (GIS) that support the collection, management, analysis, and presentation of spatial data. Students will be learn how to create maps using the world's most widely used commercial GIS produced by ESRI - ArcGIS Pro and ArcGIS Online.</p> <p>This module is concerned with how to design high-quality static paper maps and web-based interactive multimedia maps to meet specific user needs. Students will learn:</p> <ul style="list-style-type: none"> • To capture own primary data. • Find existing secondary spatial data, access its fitness for purpose and importation. • Management and basic processing of spatial data. • Coordinate systems and projections. • 2D and 3D map design. • How to output/publish maps as images, within documents and web applications. <p>The module is comprised of weekly 1 hour lectures followed by a 2 hour computer class. Support is provided for an optional additional hour after the computer class. Lectures introduce the principles of cartography (map design) and GIS (mapping software).</p>
Content	<p>Lectures are a single topic with cartography and GIS interdigitated and interwoven throughout the series as GIS is the map making tool. Cartographic subjects lectures will consider: what is a map; user needs; art or science; map projections; map symbolisation and layout; and maps as 'objects of power'. GIS lectures cover: what is GIS; data models; spatial data formats; and software use.</p> <p>Computer classes are divided in into two topics <i>Internet GIS</i> and <i>Desktop GIS</i> either side of the enrichment week. Students will first learn how to create interactive web maps and publish them embedded within a Storymap blog. They will then learn how to create a high-quality 'paper' maps suitable for inclusion in a professional report.</p>
Teaching	One-hour lecture and two-hour computer class
Assessment	<ul style="list-style-type: none"> • Digital cartography: map collection (30%) • Web mapping (35%) • Analytical GIS (35%)
Last updated	07/05/24 PJW

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Module Code	GG4008
Module Title	Introducing Human Geography
Level	4
Prerequisites	None but introductory university level geography useful
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	<ul style="list-style-type: none"> • Study Abroad/International Exchange students for Study Options 1 or 2 • Not open to Erasmus students (as Level 4)
Content	<p>In this module students will have an introduction to human geography, engaging with key academic debates and applying your learning in practice. In the first part of the module students will consider contesting debates regarding the key global issues such as global demography and energy resources.</p> <p>In the second part of the module students will focus on key contemporary issues relevant to their own lives, such as national belonging, migration, housing and home.</p> <p>In the third part of the module students will put their learning into practice through a community project to deliver a topic of their choice to visiting schools.</p> <p>➤ Autumn Semester Content:</p> <p>❖ Global Issues</p> <ul style="list-style-type: none"> • Demographic Change • Energy Resources • Economic Development • Food Security • Land and Displacement • Hazards • Green Politics • Borders <p>❖ Social and Cultural Geographies (continues into Spring Semester)</p> <p>Consideration of the ways in which some groups in our society are excluded from or denied access to all of the opportunities that are available to them. They may be excluded on the basis of race/ethnicity, class, gender, sexuality and/or age, and they may be excluded from</p>

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<p>various spaces, workplaces, educational institutes, social spaces, public space or the public sphere.</p> <p>➤ Spring Semester Content:</p> <ul style="list-style-type: none"> ❖ <i>Social and Cultural Geographies</i> ❖ <i>Schools Project</i> <p>In this section, students will work in groups to deliver a mini-lesson to a group of secondary school pupils on a topic that has been covered in this module.</p>
Teaching	Lectures, seminars and online material
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • Essay on Global Issues – 2,500 words (30%) • 10-minute Oral presentation (30%) • Schools report – 2000 words (40%)
	<p>Study Option 2:</p> <ul style="list-style-type: none"> • Essay on Global Issues – 2,5000 words (100%)
Last updated	07/05/24 PJW

[Return to TOP](#)

Module Code	GG4004
Module Title	Research and Field Work Methods
Level	4
Prerequisites	none
Credits	<ul style="list-style-type: none"> • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	<ul style="list-style-type: none"> • Note that this module is taught entirely within the Spring semester and is thus open for Study Options 1 or 3 • Not open to Erasmus students (as Level 4)

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

10

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**Geography and Environmental Science Modules for Visiting
Students 2024/25**

<p>Content</p>	<p>The module introduces a range of generic and discipline specific research and fieldwork methods. Students are introduced to their course learning aims and identify their learning targets from Induction to graduation and their alignment to their learning pathway. Students are tutored in a range of learning techniques (e.g. critical thinking and communication skills) and are introduced to assessment for learning and the role of feedback, reflection and feedforward as an integrated part of their learning journey. Students are introduced to a range of research methods that form the basis of successful investigations in their subject areas, including research design, information acquisition, qualitative and quantitative analysis and critical interpretation.</p> <p>The module introduces fieldwork as a key investigative element of geographical and environmental study and the module incorporates introductory core (Level 4) fieldwork, developing generic fieldwork skills (e.g. safety and ethical considerations) and discipline specific site investigations.</p> <ul style="list-style-type: none"> • Knowledge and critical thought • Fieldwork • Communicating ideas, writing and presentation skills • Defining research in geographical and environmental context. Empirical and deductive research investigations • Quantitative research design • Qualitative research and interviews • Qualitative research - focus groups and participant observation • Primary data and principles of survey and questionnaire design • Review and reflection • Descriptive statistics • Inferential statistics • Normal distributions 1 and 2 • Z-tables • Fieldwork methods • <i>Fieldwork: Cornwall</i>
<p>Teaching</p>	<p>Lectures, seminars (and fieldwork)</p>
<p>Assessment</p>	<ul style="list-style-type: none"> • 2,000-word fieldtrip report (100%)
<p>Last updated</p>	<p>07/05/24 PJW</p>

[RETURN TO TOP](#)
LEVEL 5 – INTERMEDIATE

Study Option 1 = Whole Year 11
 Study Option 2 = Autumn
 Study Option 3 = Spring

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**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Module Code	GG5001
Module Title	Advanced Research and Fieldwork and Methods
Level	5
Prerequisites	Successful completion of introductory university level module in research and fieldwork methods such as GG4004 (or similar).
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2
Content	<p>This is a research methods focused module where students will engage in classroom based data collection and analysis practical sessions in the autumn semester and put their learning into practice in a field-based setting in the spring semester. On completion of this module students will have gained first - hand experience of qualitative and quantitative research methods in both a classroom and a real-world environment.</p> <p>Topics:</p> <ul style="list-style-type: none"> • Qualitative and quantitative data collection and analysis research methods • Principles of qualitative and quantitative research report writing • Introduction to the principles of research design, defining the research question and identifying research aims and objectives. • Group project management skills including: planning, team-work, prioritising tasks, delegating tasks, and conflict resolution. • Fieldwork methods including planning for field-based investigations, logistical considerations, information archiving (manual and digital archives, field-notebooks, blogs, geo-tagging), • Fieldwork involving the collection and analysis of data in the field with a view to answering a research question.
Teaching	Lectures, seminars and practical computing sessions
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • qualitative research report (2,000 words) (30%) • quantitative research report (2,000 words) (30%) • final fieldwork report - 2,000 words plus graphics (40%) <p>Study Option 2:</p>

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

12

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Geography and Environmental Science Modules for Visiting Students 2024/25

	<ul style="list-style-type: none"> • qualitative research report (2,000 words) (100%)
Last updated	07/05/24 PJW

[Return To Top.](#)

Module Code	GG5002
Module Title	Geographical Theory and Practice
Level	5
Prerequisites	Successful completion of introductory university level module in research and fieldwork methods such as GG4004 (or similar).
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2
Content	<p>This module focuses on the development of geographical thought and practice from the institutionalisation of the discipline to the present. In doing so, the module traces the shifting paradigms that have dominated the discipline and examines the multiple approaches now possible within geographical research and the methodologies that underpin them. Focussing on a range of topics, part student selected, the module will explore the diverse ways that geographers working in different paradigms have approached these topics.</p> <p>Having developed a sound knowledge of geographical research, theory and practice, students will then develop an independent research proposal. In doing so, students will identify a topic of their choice, select a suitable disciplinary perspective from which to examine it and an appropriate method of investigation. Within the first part of the module students will gain a thorough understanding of the nature of geographical research. In the second part of the module, students will apply this knowledge through the development of their own research project.</p> <p>➤ Autumn Semester content: Geographical Paradigms</p> <ul style="list-style-type: none"> • Regional Geography • Quantitative Geography • Behavioural Geography • Humanistic Geography • Cultural Geography

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

Geography and Environmental Science Modules for Visiting Students 2024/25

	<ul style="list-style-type: none"> • Marxist/radical Geography • Feminist Geography • Postcolonial geography • Postmodern/Poststructural Geography
Teaching	Lectures, seminars
Assessment	Study Option 1: <ul style="list-style-type: none"> • In-class quiz (30%) • Literature review presentation (35%) • Dissertation Proposal (35%)
	Study Option 2: <ul style="list-style-type: none"> • In-class quiz (100%) (100%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5021
Module Title	Rivers, Oceans and the Atmosphere
Level	5
Prerequisites	Successful completion of introductory university level module about the environment/physical geography such as GG4002 (or similar)
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2
Content	<p>This module explores the physical science of Earth’s hydrosphere and the atmosphere, key processes and principles, and associated hazards. Through a sculpted narrative, the module curriculum will take students on an investigative journey to explore land, ocean and atmosphere environments and their interactions, with a persistent focus on the impact of climate change on these systems.</p> <p>The narrative will follow the water cycle, starting with the atmosphere and then moving on</p>

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

to precipitation on land and a study of drainage basins, followed by investigations of rivers, estuaries and coasts, and finally the ocean and ocean circulation. Hydrological and sedimentological processes will be considered, following a source to sink approach. A variety of hydrospheric and atmospheric hazards will be considered throughout the module, including riverine and coastal flooding, sea-level rise, and severe weather hazards associated with ENSO, the Indian Ocean Dipole and the SE Asian Monsoon System. Fieldwork, GIS and remote sensing practicals will be integral to this module, providing real-world skills and training relevant to a wide variety of environmental science, hazards and geography careers.

➤ **Autumn Semester: Rivers - Water on Land; Catchment to Basin**

❖ ***Water on Land***

- Introduction to Rivers- global and local scale
- Basin sediments
- Fieldwork: Hogsmill river
- Estuaries
- Water on Land & Rainfall patterns

- Water on land II & Infiltration

❖ ***Catchment to Basin***

- Coastal-beach Environments

- Deltaic Environments

- Scolt's Head Case Study

- Bathymetry and the sea floor

- Water and society

➤ **Spring Semester Content: Oceans; The Atmosphere**

❖ ***The Atmosphere***

- Introduction to Atmospheric Science
- Atmospheric processes & circulation
- Global Winds

❖ ***The Ocean***

- Ocean surface circulation
- Deep water circulation

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<ul style="list-style-type: none"> • El Nino and La Nina • Storms, tsunami and floods • Seas and oceans: Bathymetry • Oceans: Palaeoclimate records
Teaching	Lectures, practical sessions and fieldwork
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • Estuary briefing paper (3000 words) (50%) • Ocean-atmosphere report (3000 words) (50%)
	<p>Study Option 2:</p> <ul style="list-style-type: none"> • Estuary briefing paper (3000 words) (100%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5022
Module Title	Understanding our World with GIS
Level	5
Prerequisites	cartographic skills developed at introductory level such as GG4003 Digital Mapping or similar
Credits	4 (US) 7.5 (ECTS)
Suitability	<ul style="list-style-type: none"> • Note that this module is taught entirely within the autumn semester and is thus open for Study Options 1 or 2
Content	With the increasing focus on data science and big data, data literacy and the ability to develop and implement analytical workflows have become essential transferrable skills. This module is concerned with how to obtain, process, integrate, analyse, visualise, and analyse geographical data within GIS software to discover and quantify spatial patterns. It offers the

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<p>means to critically evaluate data, analytical approaches, and the outcomes in relation to the principles of information and cartographic design. The principles and methods of digital data collection and post-processing are introduced (e.g., GPS, mobile apps, aerial and space-based survey, secondary data, APIs). Students will learn how to apply exploratory and basic analytical techniques (e.g., buffer, spatial join, overlay, surface and network analysis) to discover pattern. They are introduced to and gain practical experience of the relational database, and network and surface data models and their analytical use.</p> <p>➤ Topics:</p> <ul style="list-style-type: none"> • Digital data collection and dissemination in the Information Age. • The principles of remote sensing. • The relational database, network, and surface data models. • Exploratory data analysis. • Spatial and non-spatial analytical concepts and techniques (e.g., buffer, join, distance). • How to apply fundamental cartographic and data visualisation principles for effective data communication.
Teaching	Weekly lectures and practical computing sessions
Assessment	1,500-word report plus maps and analytical outputs (100%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5023
Module Title	Principles of Ecology and Conservation
Level	5
Prerequisites	Introductory-level environmental science such as GG4002 or similar
Credits	4 (US) 7.5 (ECTS)
Suitability	Note that this module is taught entirely within the autumn semester and is thus open for Study Options 1 or 2

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Content	<p>This module builds on material introduced at Level 4 Introduction to Environmental Science or similar.</p> <p>Ecological concepts are explained using a hierarchical approach: population, community and ecosystem levels of ecology are explored, highlighting the interactions between man and nature. A research-led approach is used to emphasise the models by which ecologists attempt to explain complex biological systems. Core factual material is provided using keynote lectures to explain concepts. The practical and fieldwork elements are designed to develop observing, recording, data analysis, data interpretation and presentation skills.</p> <p>➤ Topics:</p> <ul style="list-style-type: none"> • Vegetation dynamics – change in plant community structure and diversity because of natural and human disturbance • Populations – quantitative models of population; demography and life tables; environmental and demographic stochasticity; modelling populations with unstructured and structured equations; deterministic and stochastic population models; applications in the management of populations • Behavioural ecology – the ecology of foraging; optimal foraging theory; games theory; female strategy and mate choice; mating systems, parental investments and sexual conflict • Biogeography – models of spatial distribution of organisms; historical causes of biogeographic distributions; island biogeography • Land use and land cover change (LULCC) – definitions of land use and land cover; landscape ecology; scale dependent analysis of landscape mosaic; fragmentation and patchiness; corridors and restoration; drivers of LULCC
Teaching	lectures, practical sessions, and fieldwork
Assessment	<ul style="list-style-type: none"> • 15-minute seminar presentation (40%) • 1.5 hour seen exam (60%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5024
Module Title	Contaminated Land, Assessment and Remediation
Level	5

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Prerequisites	Introductory-level geography
Credits	4 (US) 7.5 (ECTS)
Suitability	Note that this module is taught entirely within the Spring semester and is thus open for Study Options 1 or 3
Content	<p>This module has three key components. First, an understanding of the fundamental principles of soil science is developed whereby the various soil properties and processes, including storage/retention and transport of water and chemicals in soil, are explained. This provides a good support to developing an understanding of soil and hydrological interactions with soil nutrients and contaminants.</p> <p>This knowledge of soil and water environmental interaction forms the essential base for introducing and explaining soil pollution, including the impact of pollutants on environmental systems (soil, water, plants and air) and human health. It also discusses pollution mitigation and control/remediation strategies. Lectures are supported by fieldwork and laboratory practical sessions. The field and laboratory work components are designed to develop surveying, recording, measuring, sampling, laboratory testing, data analysis, data interpretation and presentational skills.</p> <p>➤ Topics:</p> <ul style="list-style-type: none"> • Soil development and soil physical composition; soil texture, structure, stability, aeration and drainage, and how these influence soil physical processes. • Soil colloids - inorganic (silicate clays, oxides and hydroxides of iron, aluminium), their genesis and mineralogical organisation; organic soil colloids (humus) - their importance in nutrient and water supply; exchange/adsorption/desorption reactions on soil surfaces, effect of pH on surface charge and soil chemistry. • Introduction to soil contamination, basic principles, definition. Characteristics of polluting substances, pollutant transformations and rate-determining steps. Cause-effect control relationships; additive, synergistic, antagonistic effects; target organisms, toxicity and pollution transfer between the soil-water and soil-plant systems. • Land Pollution: Soil physical, chemical and biological properties of soils, and their influence on migration, bioavailability and persistence of pollutants in the soil environment. Case studies of solid waste disposal, pollution impact of mining, industry and agriculture. Assessment and remediation of contaminated land. • Pollution Control: Introduction to pollution control strategy/technology, economic and legislative control. Concepts of precautionary principle, vulnerability and risk. The Water Act 1989 and the Environment Act 1990 and the role of the Environment Agency in pollution control in England and Wales.

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Teaching	lectures, practical sessions and fieldwork
Assessment	Soil analysis report (3000 words) (100%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5025
Module Title	Capitalist Societies
Level	5
Prerequisites	None
Credits	4 (US) 7.5 (ECTS)
Suitability	Note that this module is taught entirely within the Autumn semester and is thus open for Study Options 1 or 2
Content	<p>The module is designed to introduce students to the basic principles of investigating a range of contemporary global issues in terms of their political economy. This includes a wide range of spatial issues from the local to the global and the inter-linkages and process that bind them together. The key focus is to understand how contemporary capitalism works and plays out across different spatial levels and to highlight the processes that underpin it and the implications for different communities and their environments. This includes exploring relations between, state, business and citizens within the context of how we understand the global development challenges of climate change and sustainable development.</p> <p>Through a series of instructor-led lectures students will be introduced to the manner in which capitalism has development and the mechanics of capital circulation, together with an understanding of how these processes of wealth accumulation and growth relate to the challenges of climate change and sustainable development. This will be understood in relation to how capitalism works set against cultural and social diversity and will question the issues of alienation, nature and sustainable development. Material and case studies will be taken from historical events and contemporary news stories and range from the global to the local.</p> <p>Through a series of seminar sessions, students will explore how the topics discussed above pertain to an issue of their choice. In doing so they will consider the approaches that</p>

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

20

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Geography and Environmental Science Modules for Visiting Students 2024/25

	geographers have used with regard to understanding capitalism, the epistemological principles upon which they are based, their positionalities and their connections with wider discourses. These can be historical or contemporary and pitched at a range of spatial scales to cover a range of global locations.
Teaching	Lectures and seminars
Assessment	<ul style="list-style-type: none"> • Online MCQ test (20%) • 1-hour seen exam (80%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5026
Module Title	Advanced Research Methods and Statistics
Level	5
Prerequisites	None
Credits	8 (US) 15 (ECTS)
Suitability	Study Option 1 only
Content	<p>Students will design, manage and execute an environmental science research project in a 'real-life' field-based setting. Students are tutored in aspects of research design: defining research questions, research philosophy and appropriate methodologies. They will learn practical aspects of research design such as logistical considerations of time and budget limitations, as well as data archiving. They will also be trained in quantitative and qualitative data analysis. Finally, they will learn how to collect, manipulate, and interpret statistical environmental and geographical data and apply this learning to their project-based investigations.</p> <p>➤ Topics:</p> <ul style="list-style-type: none"> • Quantitative techniques including understanding p-values and statistical alpha errors, standard error, calculating 95% and 99% confidence intervals, t-test, ANOVA, linear

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<p>regression and multiple regression, analysing frequency data</p> <ul style="list-style-type: none"> • Qualitative methods include data collection using interviews and analysis which will focus on different methods of textual analysis • Planning for field-based investigations, logistical considerations, information archiving (manual and digital archives, blogs and cross-reference), field-based support tools and methodologies (location-based analysis, mobile technologies, etc.) through theoretical and practical example. • Design, management, execution and communication of a field-based research project.
Teaching	lectures, computer practical sessions, and seminars
Assessment	<ul style="list-style-type: none"> • Individual quantitative 1,500- word report plus graphics (25%) • Individual qualitative 2000-word report plus graphics (25%) • Research proposal 3,500 words plus illustrations (50%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5027
Module Title	Cultural Geographies
Level	5
Prerequisites	Introductory-level geography
Credits	4 (US) 7.5 (ECTS)
Suitability	Note that this module is taught entirely within the Spring semester and is thus open for Study Options 1 or 3
Content	<p>This module examines geographical approaches to the study of societies and cultures, and their relationships with the environment, past and present. In doing so, the module examines the development of different approaches towards the study of people and place, the representational forms used and produced, the positions from which they speak, and their role in shaping discourses about people and place in various parts of the world. The module is case study based where students examine research from the academic literature, some of which will be instructor-led, and some of which will be independently sourced by students. Students will also be asked to apply the ideas discussed in class to real world examples.</p> <p>Through a series of instructor-led lectures students will be introduced to the diversity of approaches that geographers have taken to explore society and cultures, and their</p>

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<p>relationship to the wider environment, the representational forms use and produced, the positions from which they speak, and their role in shaping wider discourses on people, places and environments.</p> <p>Through a series of seminar sessions, students will explore how the topics discussed above pertain to social or cultural groups, or issues of their choice. In doing so they will consider, the approaches that geographers have used, the politics and positionality of representations used and produced, and their connections with wider discourses on people, place and environments. Here students will draw on case studies from the academic literature, some of which will be provided and some of which will be independently sourced by students. Students will also be asked to consider how ideas from the literature can be applied to real world examples.</p>
Teaching	Lectures and seminars
Assessment	3000-word report (100%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG5028
Module Title	Geomorphology, Geotechnics and Geohazards
Level	5
Prerequisites	Introductory-level geography or environmental science
Credits	4 (US) 7.5 (ECTS)
Suitability	Note that this module is taught entirely within the Spring semester and is thus open for Study Options 1 or 3
Content	<p>This module presents a series of thematic taught sessions overviewing major geomorphological processes and landforms, sedimentary environments and potential hazards associated with these environments. Students will investigate a diverse range of geomorphological environments encapsulating a variety of continental and tectonic terranes and coastal landscapes.</p> <p>Module curricula will explore geomorphological features fundamental to these various environments and consider the geological and geomorphological processes that shape these</p>

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

23

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**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<p>landscapes. Geomorphological change will be considered for the various landscapes and, in concordance, students will explore how climate change is impacting the various environments, in what way this affects populations living in these areas, and how the risk can be managed. On completion, students will gain a detailed understanding of the major surface processes and their geomorphological significance and will be able to interpret a range of geomorphological landscapes.</p> <p>The module emphasises the mastery of geomorphological skills through experiential learning closely associated to core lecture delivery. The practical programme will aid students in evaluating key geomorphological concepts, learning and testing analytical techniques. The fieldwork programme provides an arena for applying new skills and knowledge gained.</p> <p>A series of seminars will provide a narrative for the module; introducing students to the concept of geomorphology, exploring how geomorphological landscapes are underpinned by tectonics and linked to geology, and then investigating a variety of different geomorphological environments – learning how to be a landscape detective. The seminars are designed to introduce students to the key features of each topic – exploring scientific principals and processes underpinning the discipline of geomorphology in detail, and to lay the preparatory ground for the application of knowledge.</p> <p>The module will examine the practical application of geomorphological techniques in hazard assessment. Case studies from published literature will be used, where students examine such applications.</p> <p>A series of corresponding workshops will provide the students with the opportunity to deepen knowledge gained in the seminars through engaging with a series of practical exercises, incorporating a variety of skills essential to the study of geomorphology and geomorphological hazards, e.g., rock identification, sedimentary and granulometric analyses, and production of geomorphology and geophysical hazard maps within various mapping software (e.g., ArcGIS™) utilising primary and secondary data.</p>
Teaching	Seminars, practical laboratory sessions (workshops), fieldtrip
Assessment	Fieldtrip stakeholder report - 3000 words plus illustrations (100%)
Last updated	07/05/24 PJW

[Return to Top](#)

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Module Code	GG5045
Module Title	Disasters, Society and Culture
Level	5
Prerequisites	Successful completion of introductory university level geography/environment module
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2
Content	<p>This module introduces the key theories and concepts in the social science approaches to understanding disasters, one of the major global challenges facing humanity. It explores the social, cultural, political, economic and other factors that combine to construct vulnerabilities to disasters, and the ways in which these might be countered through disaster risk reduction (DRR) strategies.</p> <p>These issues are explored at a range of spatial scales, from the local to the global, along with the inter-linkages and process that bind them together. The relationship between evolving theories and practice are explored through a number of case studies which consider developed and developing world examples across a variety of hazard types.</p> <p>The challenges posed by the interdisciplinary approaches that are necessary to tackle disasters, and the need to communicate with a wide range of stakeholders, are examined. The complex range of factors influencing DRR implementation in particular contexts, and the variety of skills needed to evaluate DRR are investigated through fieldwork.</p> <p>➤ Autumn Semester:</p> <p>❖ <i>Understanding the Social Approaches to Disaster</i></p> <ul style="list-style-type: none"> • Introducing social approaches to disaster • Disaster myths and the media. • Disaster Risk Reduction (DRR) and international governance • DRR and Quantifying Risk • Vulnerability and Resilience • Culture and Hazards • Culture and Hazards • The Political Economy of Disasters - Accidents Waiting to Happen • The Shock Doctrine - Make the Most of a Bad Job • Community resilience

Geography and Environmental Science Modules for Visiting Students 2024/25

	<ul style="list-style-type: none"> ➤ Spring Semester: ❖ <i>The Challenges of Risk Communication</i> <ul style="list-style-type: none"> • Risk Communication • Risk Communication Case Studies ❖ Fieldtrip: Tenerife
Teaching	Lectures, seminars and student field-based learning
Assessment	Study Option 1: <ul style="list-style-type: none"> • DRR essay – 3000 words (40%) • Risk Communication Posters (30%) • Fieldwork report (30%)
	Study Option 2: <ul style="list-style-type: none"> • DRR essay – 3000 words (100%)
Last updated	07/05/24 PJW

[Return to TOP](#)

LEVEL 6 – ADVANCED

Module Code	GG6010
Module Title	Urban Geographies
Level	6
Prerequisites	Substantial prior study of intermediate-level study in human geography such as GG5050 or similar
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2 or 3

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

Geography and Environmental Science Modules for Visiting Students 2024/25

Content	<p>The module reviews current perspectives on notions and understandings of what constitutes urban spaces and approaches to studying urban environments, exploring critical perspectives and intervention strategies that construct these environments.</p> <p>It also explores the relationship between urban form and identity and questions the links between cultural practices and concepts of community, with a particular focus on social processes, urban spaces and design within the built environment.</p> <p>Overall topics:</p> <ul style="list-style-type: none"> • Location and Movement • Constructions and Architecture • Envisioning and Experience • Social and Political Organisation • Sites and Practices • Design and Identity • Inclusion, Management and Policy <p>➤ Autumn Semester Content:</p> <ul style="list-style-type: none"> • Dilemma of City Development • Understanding the Urban • Concept of Community <p>➤ Spring Semester Content:</p> <ul style="list-style-type: none"> • Transport • Place Making • Inclusive Design • Inclusion and Community • Site visit and project review
Teaching	Lectures, field visits, group work and seminars
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • In class seen Examination (40%) • Urban Design Presentation (30%) • Urban Design Individual Report – 2,000 words (30%) <p>Study Option 2:</p> <ul style="list-style-type: none"> • In class seen examination (100%)
	Study Option 3:

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<ul style="list-style-type: none"> • Urban Design Presentation (50%) • Urban Design Individual Report – 2000 words (50%)
Last updated	07/05/24 PJW

[Return to top](#)

Module Code	GG6020
Module Title	Development Geographies
Level	6
Prerequisites	Substantial prior study of intermediate-level study in human geography such as GG5050 or similar
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2 or 3
Content	<p>This module introduces students to critical issues of development including themes such as economic growth, poverty, exclusion, inequality, gender and conflict. It also explores the relations within and between countries and the challenges of development and aid in the context of globalisation. The module includes substantial fieldwork and independent desk-based research. Whilst it introduces theories of development, it is an applied module which seeks to empower students to debate contemporary geographical and environmental issues within an international context.</p> <p>➤ Autumn Semester:</p> <ul style="list-style-type: none"> ❖ Theories of Development <ul style="list-style-type: none"> • Theory: Modernisation • Theory: Dependency • Theory: Neoliberalism • Theory: Post-development • Theory: Application of theory to contexts ❖ Development Issues <ul style="list-style-type: none"> • Themes: The media

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

Geography and Environmental Science Modules for Visiting Students 2024/25

	<ul style="list-style-type: none"> • Themes: Gender ➤ Spring Semester: ❖ Development Issues • Themes: Hazards • Themes: Tourism • Themes: International Aid ➤ Fieldwork planning <p>NOTE THAT THERE IS A FIELDTRIP TO SOUTH AFRICA IN SPRING SEMESTER</p>
Teaching	Lectures, seminars and fieldwork
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • 2,000-word development essay (40%) • Scoping report (30%) • Presentation (30%) <p>Study Option 2:</p> <ul style="list-style-type: none"> • 2,000-word development essay (100%) <p>Study Option 3:</p> <ul style="list-style-type: none"> • Part of Study Option 1 assessment
Last updated	07/05/24 PJW

[Return to TOP](#)

Module Code	GG6030
Module Title	Global Rural Geographies
Level	6
Prerequisites	Substantial prior study of intermediate-level study in human geography such as GG5050 or similar

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

Geography and Environmental Science Modules for Visiting Students 2024/25

Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2 or 3
Content	<p>This module aims to provide students with an understanding of contemporary debates relating to rural areas in both the developed and developing world. It examines the processes and patterns of contemporary change in rural regions and analyses the factors conditioning the restructuring of rural land use and rural economic, social and cultural systems across the World.</p> <p>Topics covered:</p> <ul style="list-style-type: none"> • Theoretical perspectives in rural geography. • Concepts and dimensions of rurality. • Sustainable rural livelihoods • Temperate and tropical farming systems • Relationship between local food production systems and global food distribution systems • Contemporary restructuring of agricultural systems. • Agricultural policy and practice. • Agri-environmental schemes and ecosystem services • Agricultural diversification • Rural social change. • Inequality and rural space • Policies and rural lifestyles <p>➤ Autumn Semester:</p> <ul style="list-style-type: none"> ❖ <i>Defining Rurality; Global Food Systems</i> <ul style="list-style-type: none"> • Land and Possession • Labour and Migration • The Global Food Crisis • Industrial Agriculture • Contesting the Rural • Alternative Food Networks • Alternative Food Production ❖ <i>Changing Rural Landscapes</i> <ul style="list-style-type: none"> • Rural depopulation • Rural regeneration

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

Geography and Environmental Science Modules for Visiting Students 2024/25

	<p>➤ Spring Semester:</p> <p>❖ <i>Changing Rural Landscapes</i></p> <ul style="list-style-type: none"> • Farm Diversification • Rural Tourism • Creative Industries • Rural Gentrification <p>❖ <i>The Future of the Rural</i></p> <ul style="list-style-type: none"> • Rural Crime • Rural tourism
Teaching	Lectures and seminars
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • Oral Presentation – 10 minutes (30%) • 2,500-word essay (30%) • Investigative Journalism – 2,000 word script (40%) <p>Study Option 2:</p> <ul style="list-style-type: none"> • Presentation (100%) <p>Study Option 3:</p> <ul style="list-style-type: none"> • 2,500-word essay (100%)
Last updated	07/05/24 PJW

[Return to TOP](#)

Module Code	GG6070
Module Title	The Challenge of Climate Change
Level	6
Prerequisites	Substantial prior study of intermediate-level study in geography/environment
Credits	<ul style="list-style-type: none"> • Full Year: 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

Suitability	Study Options 1 or 2
Content	<p>This module focusses on understanding the challenges of climate change. It starts with an overview of the science of climate change, before moving on to an exploration of what this suggests about the potential changes in climate that may occur and the possible impacts this may have on physical and human systems in different parts of the world. This will provide the foundation for assessing what the physical and social challenges are likely to be that may need addressing into the future, in essence the risks that climate change poses. But this topic will also involve exploring some of the challenges faced in attempting to address these risks, such as issues of uncertainty, cost, current lifestyle trajectories and different visions of potential solutions, which can act as barriers to action.</p> <ul style="list-style-type: none"> ➤ Autumn Semester: <ul style="list-style-type: none"> ❖ <i>The Science of Climate Change</i> <ul style="list-style-type: none"> • Climate Change Forcings • The Earth's energy budget • Palaeoclimate Archives and Proxies • Palaeoclimate proxies workshop • Climate models • Quaternary Climate Change ❖ <i>Indicators of Climate Change</i> <ul style="list-style-type: none"> • Anthropogenic greenhouse gas emissions • Sea Level Rise: Cryosphere melting and thermal expansion • Ocean acidification • Deforestation, soil, and the carbon cycle • Terrestrial systems ➤ Spring Semester: <ul style="list-style-type: none"> ❖ <i>Impacts and Hazards of Climate Change</i> <ul style="list-style-type: none"> • Climate Change and atmospheric hazards • Fire activity and climate change • Coastal and ocean systems • Coastal flooding and climate change • Natural Disasters and climate change ❖ <i>Adaptation and Mitigation to Climate Change</i> <ul style="list-style-type: none"> • Socioeconomic indicators of climate change: from health issues to agricultural impacts • Are we entering the Anthropocene?

Geography and Environmental Science Modules for Visiting Students 2024/25

	<ul style="list-style-type: none"> • Mitigation of climate change: an introduction • Workshop on climate change migrations • Adaptation to climate change: an introduction
Teaching	Lectures and seminars
Assessment	Study Option 1: <ul style="list-style-type: none"> • Climate Science report -2,500 words (30%) • Climate Hazards report - 2,500 word essay (30%) • Exam (40%)
	Study Option 2: <ul style="list-style-type: none"> • Witten assignment -2,500 words (100%)
Last updated	07/05/24 PJW

[Return to TOP](#)

Module Code	GG6080
Module Title	Land and Water Resources Management
Level	6
Prerequisites	Successful completion of module about the environment/soil/water resources such as GG5020 or similar
Credits	<ul style="list-style-type: none"> • Full Year 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2 or 3
Content	The module examines the relationship between land and water management, global challenges associated with the management of land and water, and sustainable options to seek their resolution. The module will develop an understanding and critical evaluation of these challenges from several perspectives through the systematic investigation of land-use practices, the applications of soil science and linking practices to processes and patterns of land degradation, the interface between land management and water management, global concerns for water security, land use impacts on the

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

wider environment, including climate, physical and socio-political drivers and an examination of the regional land-water management issues.

Overall topics covered include:

- The definition and recognition of land and water resources problems, water scarcity and security, sustainability criteria, risk assessment, scales of approach and terms of reference.
- River basin management, investigation of the physical, social and geo-political relationships of integrated river basin management, historical contexts and the lessons of history, contemporary management systems, governance, regulation and ownership.
- Management of extremes: flood risk, flood vulnerability and flood management; droughts and drought management
- Water quality management of surface and groundwater, water pollution, water treatment, water quality objectives and compliance.
- Sustainable Urban Drainage and integrated storm-water management
- Water conservation, reuse and desalination as alternative strategies to tackling water resource challenges.
- Soil quality and its relationship with water, food production and environmental health, definitions, principles and conceptual models.
- Land degradation, nutrient management in farming systems, exploitation of soil fertility, cultivation practices and carbon turnover, loss of nitrogen, phosphorus and carbon and their wider implications, including water quality and climate change.
- Acid deposition, soil and water acidification and its wider implications, the role of farming, transport and industrial activities.
- Soil contamination, conceptual models and case studies of their toxicities/exposures, soil-water pathways and human and animal health implications
- Soil salinisation, causes and impacts on soil quality including agricultural production.
- Soil erosion and soil conservation management strategies

➤ **Autumn Semester Content: Water Resources Management**

- Global water resources challenges
- A history of water management and IBM
- Water Footprint and Virtual water
- Dams and River regulation
- Groundwater management
- Flood management
- Water Conservation and reuse
- Desalination integration
- Sea Level Rise and Wetland Management

Geography and Environmental Science Modules for Visiting Students 2024/25

	<p>➤ Spring Semester Content: Land Resources Management</p> <ul style="list-style-type: none"> • Overview of land and water resources management • Water Quality • Nutrients, agriculture and water quality • Soil acidification and land degradation • Soil erosion and land degradation • Soil salinisation and land degradation • Land cover, land use and soil organic carbon
Teaching	Lectures and seminars
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • 2,500-word fieldwork report (25%) • 2,500-word research essay (25%) • Examination (50%)
	<p>Study Option 2:</p> <ul style="list-style-type: none"> • 2,500-word fieldwork report (100%)
	<p>Study Option 3:</p> <ul style="list-style-type: none"> • 2,500-word research essay (100%)
Last updated	07/05/24 PJW

[RETURN TO TOP](#)

Module Code	GG6130
Module Title	Disaster Management
Level	6
Prerequisites	Successful completion of intermediate university-level study of environmental hazards such as GG5045 or similar.

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

Credits	<ul style="list-style-type: none"> • Full Year 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1, 2 or 3
Content	<p>This module takes a critical approach to understanding disaster management and its implementation. The module examines the varying ways in which societies attempt to reduce the impacts of hazards through disaster management.</p> <p>The module explores how the historical, geographical, social, economic and political context shapes the creation and implementation of disaster management in both the developed and developing world. It critically examines the application of disaster management in a number of contexts and for a range of hazards, through the phases of the disaster management cycle.</p> <p>The module develops a range of employability skills to prepare student for employment in environmental hazards and disaster management careers. These include interaction with stakeholders, an examination of case studies, development of practical skills and assessments which mimic those used by professionals.</p> <p>➤ Autumn Semester: Flood Management in England and Beyond; Disaster Management - a Global Perspective</p> <p>This part of the module examines the disaster management cycle, explores the development of emergency response in England through the example of flooding, our most threatening 'natural' hazard and considers the approach to disaster management in a number of countries.</p> <p>❖ <i>Flood Management in England and Beyond</i></p> <ul style="list-style-type: none"> • Introduction to Disaster Management • Flood Management in England • The localisation of flood management in England • Flooding and community engagement • Managing the Thames • Trip to the Thames Barrier <p>❖ <i>Disaster Management - a Global Perspective</i></p> <ul style="list-style-type: none"> • Humanitarian Disaster Response 1 • Humanitarian Disaster Response 2 • Humanitarian work and the Red Cross <p>➤ Spring Semester: Emergency Management in the UK</p>

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	<p>In this semester, the module then looks more broadly at the current legislation guiding emergency planning in the UK and the organisations tasked with implementing it. A number of more specialist skills are also explored.</p> <ul style="list-style-type: none"> • Assessing risk and risk registers • The role of the Local Resilience Forum • The role of the Local Authority in London emergency preparedness, response & recovery • The Local Authority and contingency planning • Urban Search and Rescue • Search and Rescue and Navigation 1 - includes local fieldwork
Teaching	Lectures, seminars and practical classes
Assessment	<p>Study Option 1:</p> <ul style="list-style-type: none"> • Flood Management report – 4000 words (50%) • Policy Brief – 4000 words (50%)
	<p>Study Option 2:</p> <ul style="list-style-type: none"> • Flood Management report – 4000 words (100%)
	<p>Study Option 3:</p> <ul style="list-style-type: none"> • Policy Brief – 4000 words (100%)
Last updated	07/05/24 PJW

[Return to Top](#)

Module Code	GG6140
Module Title	GIS: Transforming Geography and the Environment
Level	6
Prerequisites	Prior study of Geographic Information Systems is essential.
Credits	<ul style="list-style-type: none"> • Full Year 8 (US) 15 (ECTS) • Single Semester: 4 (US) 7.5 (ECTS)
Suitability	Study Options 1 or 2

Study Option 1 = Whole Year
Study Option 2 = Autumn
Study Option 3 = Spring

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

<p>Content</p>	<p>This module has a twin focus on changes that have impacted on Geography and Environment over recent decades and how these have created opportunities for geographical and spatial investigation to address an expanding range of applications. Information technology, in particular GIS, is one of the major drivers of change and this module explores the application of GIS in a range of domains encompassing socio-demographic, economic, political, environmental, natural and anthropogenic hazard events.</p> <p>It provides practical experience of using a broad spectrum of geospatial data and spatial analytic techniques in contexts related to ‘real world’ problems. Application areas may include, but are not limited to, area classification and geomarketing, crime mapping and geographical profiling, historical GIS, disease mapping, health care resourcing, environmental modelling and hazard mapping, mitigation and monitoring.</p> <p>GIS has not only impacted on the geography and environment of the world, but also on Geography and Environmental Science as academic disciplines. The module encourages to reflect on changes over recent decades and to imagine how further evolution of Geographical Information Systems and Science has to potential to create a new future for humankind.</p> <p>➤ Autumn Semester:</p> <ul style="list-style-type: none"> • Descriptive Spatial Statistics • Proximity and Overlay Analysis • Spatial Association • Podcasts • Spatial Interpolation • Network Analysis <p>➤ Spring Semester:</p> <ul style="list-style-type: none"> • Spatial Indices • Spatial Statistics and Regression • Geographically Weighted Regression • Environmental and Spatial Modelling • Qualitative GIS
<p>Teaching</p>	<p>Lectures, seminars and practical classes</p>
<p>Assessment</p>	<p>Study Option 1:</p> <ul style="list-style-type: none"> • 10-minute audio podcast (30%) • Critical report (1000 word)s (10%) • Capstone project 4000 words (60%)

**Geography and Environmental Science Modules for Visiting
Students 2024/25**

	Study Option 2: <ul style="list-style-type: none">• 10-minute audio podcast• Critical report (1000 words)
Last updated	07/05/24 PJW

[Return to Top](#)