

Geography

BSc (Hons)

COURSE DETAILS

- A level requirements: [ABB](#)
- UCAS code: F800
- Study mode: Full-time
- Length: 3 years

KEY DATES

- Apply by: [31 January 2024](#)
- Starts: 23 September 2024

Course overview

Geography offers unique insights into many of the most pressing issues facing the world in the 21st century, such as climate change, living with environmental change, sustainability, hazards, pollution, and natural resource management. Our Geography BSc (Hons) course helps you develop expert knowledge and skills to interrogate the range of different approaches to, and perspectives on, these issues, as well as the ability to understand how they interact.

The University of Liverpool is home to one of the longest established Geography departments in the world, with courses on offer since 1886. Our expertise in physical geography spans climate change (past, present and future), rivers and flooding, glaciology and ice sheets, coastal dynamics and management, vegetation change, sustainability, natural hazards and living with environmental change.

The Geography BSc (Hons) programme explores important questions about whether our planet's natural resources can

sustain an increasing population, how physical earth systems respond to human activity and changing climate, how we manage our resources, and how we live with environmental change. If you are passionate about environmental issues and addressing problems on a local and global scale, this is the programme for you.

INTRODUCTION

Many people who take the Geography BSc (Hons) programme choose physical geography modules, which are more scientifically based. However, the full range of human geography modules is also open to you and the flexibility of the degree allows you to shape your own programme of study. This means that you can either specialise in physical geography or study both physical and human geography as part of a BSc degree.

You can also take up to two 15 credit modules per year from other subjects so you can maintain an interest in another discipline as part of your BSc Geography degree. We will guide you in your module choice to ensure that you choose modules that complement each other and follow a pathway that will help you to gain skills and knowledge relevant to your future career.

A number of the School's degree programmes involve laboratory and field work. Fieldwork is carried out in various locations, ranging from inner city to coastal and mountainous environments. We consider applications from prospective disabled students on the same basis as all other students, and reasonable adjustments will be considered to address barriers to access.

WHAT YOU'LL LEARN

- Specialise in physical or human geography, or both
- Accredited by the Royal Geographical Society with IBG
- Fieldwork opportunities, internationally and closer to home
- A vibrant city to study, with dynamic marine and coastal environment
- Socio-cultural, political, and physical landscape evident within the city region
- Award-winning learning environment.

ACCREDITATION

This programme is accredited by the Royal Geographical Society (with IBG)

Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

YEAR ONE

In order to give a strong foundation to your degree, all students take core modules in year one, which introduce you to the breadth of the subject and give you a grounding in the key concepts and skills which are integral to the rest of the course. You then get a choice of optional modules from within physical or human geography, or from other disciplines including geology, oceanography, ecology, earth sciences, life sciences, modern languages, sociology, psychology, and planning amongst many others.

NOTICE

Students will take the following compulsory modules and select from the optional modules detailed below.

COMPULSORY MODULES

EXPERIMENTS IN PHYSICAL GEOGRAPHY (ENVS120)

Credits: 15 / Semester: semester 1

The module uses laboratory experiments to allow students to gain first-hand experience of some fundamental physical, biological and chemical processes underlying physical geography, aimed primarily at interactions between people and their physical environment. It is designed to provide a foundation for environmental modules in the second and third years. This module comprises multiple whole-day practical sessions, each designed to give students first-hand experience of a topic important in understanding our changing environment. Dedicated computer practicals are also run to provide training in use of EXCEL, MINITAB, and basic inferential statistics. Students get formal feedback in each assessed week (one poster per group). However, perhaps most valuable is the feedback obtained informally via discussions during the sessions.

LAKE DISTRICT FIELDCLASS (ENVS163)

Credits: 15 / Semester: semester 2

This module is the residential field-class available to first year BSc Geographers, comprising a residential field trip to the Lake District; there is also an online alternative for those unable to attend. Module delivery is via some initial lectures to set the scene. The field class commences with a guided walk introduction to the study area, currently based in Grasmere and using the Easedale Valley. The following four days are a tutor-led introduction to key techniques and skills. The students in four groups rotate through the four activities. The activities may vary, but currently address: topographical survey and slope controls over soil shear strength, long-term environmental change using the fringing reed-swamp of Grasmere, hydrology and fluvial flow processes monitoring an upland stream, and geomorphological mapping and glacial landforms. The module uses a fieldwork-based problem-solving approach to explore some of the fundamental physical and chemical processes underlying physical geography. It is designed to provide a foundation for fieldwork and other practical Physical Geography modules in the second and third year.

LIVING WITH ENVIRONMENTAL CHANGE (ENVS119)

Credits: 15 / Semester: semester 1

This module examines a number of global 'grand challenges' facing humans on the planet earth related to climate and environmental change. It will introduce students to core concepts of sustainability and human impacts upon the environment, as well as exploring the range of proposed solutions and mitigation strategies which are available to understand climate and environmental change. The module thus provides a core knowledge base for social and natural scientists who wish to understand environmental change.

STUDY SKILLS AND GIS (ENVS100)

Credits: 30 / Semester: whole session

This 30-credit module will provide the bedrock for your degree, and comprises five main elements. Firstly, pastoral and study support, provided via a series of regular one-to-one and small-group tutorials with an allocated academic tutor/adviser; secondly, development of core study skills, including essay writing, lecture-note taking, critical thinking, presentation skills, and bibliographic searching and referencing; thirdly, a hands-on introduction to the fundamentals of Geographical Information Systems, helping you learn how to combine spatial data from different sources to create maps that address real-world problems; fourthly, a fieldwork experience designed to help you develop data collection and analysis skills, to enhance your academic understanding and to provide you with an opportunity to get to know the other members of your degree cohort better; fifthly, employability training designed to help you better understand what graduate employers are looking for, how to apply for summer work and/or volunteering opportunities, and how best to use your time at University to maximise your employability upon graduation.

THEORY AND LABORATORY EXPERIMENTS IN EARTH SURFACES PROCESSES (ENVS165)

Credits: 15 / Semester: semester 2

The module uses a lecture and laboratory-based problem-solving approach to explore some of the fundamental physical and chemical processes underlying physical geography. It is designed to provide a foundation for environmental and physical geography modules in the second and third year. This module comprises multiple whole-day practical sessions, each designed to give students first-hand experience of a topic important in understanding our changing environment. Students get formal feedback in each assessed week (one poster per group). However, perhaps most valuable is the feedback obtained informally via discussions during the sessions.

OPTIONAL MODULES

CLIMATE, ATMOSPHERE AND OCEANS (ENVS111)

Credits: 15 / Semester: semester 1

Climate, Atmosphere and Oceans provides an understanding of how the climate system operates. The module draws on basic scientific principles to understand how climate has evolved over the history of the planet and how the climate system is operating now. Attention is particularly paid to the structure and circulation of the atmosphere and ocean, and how they both interact. The course emphasises acquiring mechanistic insight and drawing upon order of magnitude calculations. By the end of the module students will understand how the oceans and atmosphere combine to shape Earth's climate. Students gain quantitative skills by completing a series of coursework exercises and a final exam. Students address the Net Zero carbon goal via group work involving digital storytelling.

ECOLOGY AND CONSERVATION (ENVS157)

Credits: 15 / Semester: semester 2

The zone of life on earth, or the 'biosphere', is a highly dynamic system responding to external pressures including changing human activities. The biosphere obeys a numbers of simple natural principles, but these often interact to create complex and sometimes unexpected responses. Using a wide range of examples we will explore these interactions between organisms and the environment. We will examine how species organise into communities, and how energy and other resources flow through ecosystems. We will explore how ecosystems respond to change, including gradual environmental shifts, sudden disturbance events and the effects of human activities. We will also learn how the key principles of ecology can be applied to conservation. We will assess the current state of the biosphere, and evaluate the major current threats. We will also look towards the future of ecosystems, including whether we can restore degraded habitats, and recreate "natural" landscapes.

HUMAN GEOGRAPHY THROUGH MERSEYSIDE (ENVS162)

Credits: 15 / Semester: semester 2

Liverpool has been described as 'the world in one city', and in this module we utilise this unique geographical location to introduce key concepts and practices of human geography. Through a combination of field excursions, lectures and practical exercises, we develop skills of data collection, interpretation and analysis through considering the history, politics and socio-demographic characteristics of the city. The module helps students understand the connection between geographical concepts and real-world examples and is assessed through data analysis practicals and a field-based portfolio exercise.

SEDIMENTARY ROCKS AND FOSSILS (ENVS118)

Credits: 15 / Semester: semester 1

This module provides a basic introduction to sedimentology and palaeontology. Students learn about the origin of sediment, sedimentary processes and structures and the ways in which sediments are converted into solid rock. The course outlines the importance of sedimentary rocks for hydrocarbons, water and as construction materials. Students learn how to describe and interpret sedimentary deposits.

The palaeontology component introduces students to the major fossil groups and to the ways in which organisms can be preserved as fossils. It covers the importance of fossils for the study of evolution, environmental change and earth history. Students learn how to describe fossils and how observations contribute to a broader understanding.

Students will be assessed by means of two practical tests and a theory examination.

MARINE ECOSYSTEMS: DIVERSITY, PROCESSES AND THREATS (ENVS122)

Credits: 15 / Semester: semester 2

This module is designed to deliver an introduction to the diversity of marine ecosystems across the globe. Each week during in person lectures you will be introduced to a new ecosystem and will learn about this habitat, specifically the main organisms, key processes, and human threats to each ecosystem described and explored. Central to this module are interactive discussion sessions (workshops) that will build an understanding of how marine ecosystems are expected to respond to the human-induced changes of the anthropocene. During these workshops you will learn to critique a piece of scientific research in small group discussions guided by academics. Your knowledge and understanding will be assessed via open-book online tests, and a group project in which you will create an infographic outlining the threats a particular ecosystem faces.

ESSENTIAL MATHEMATICAL SKILLS (ENVS117)

Credits: 15 / Semester: semester 1

This module is designed to provide students without a A-Level GCE level (or equivalent) background in mathematics a foundation to their degree programme. The module covers pure maths, maths mechanics and statistics developing the required knowledge and skills to be able complete degree programmes in Ocean Sciences, Earth Sciences, Geography, Environmental Science and Marine Biology. The module is taught as weekly lectures following a ten-chapter book developed for the module by world leading experts in the fields. Lectures are supplemented with workshops where concepts can be discussed and skills improved. The module is assessed through online pop-quizzes and a formal written exam.

NEW HORIZONS IN HUMAN GEOGRAPHY (ENVS116)

Credits: 15 / Semester: semester 2

This module introduces new aspects of geographical thought to the First-Year students which are unlikely to have been encountered via an A level geography syllabus. It also aims to enhance students' understanding and awareness of complex global issues, focusing on two sub-disciplinary themes in human geography. Exact content will vary each year to reflect changes in the discipline, but broadly, one area will focus on understanding human population changes and geographical data (e.g. health or population geographies), whilst another will explore social, cultural and political approaches to geography (e.g. geopolitics, borders and nation states).

RESEARCH FRONTIERS IN HUMAN GEOGRAPHY (ENVS161)

Credits: 15 / Semester: semester 1

Contemporary Human Geography is a diverse discipline which offers unique insights into many of the most pressing challenges facing the world in the 21st Century. Many of the issues that reach the headlines on a daily basis are inherently geographical and research within human geography makes important contributions to knowledge of a broad range of social, cultural, political, economic, environmental and development challenges. This module provides an introduction to cutting edge debates within contemporary human geography, highlighting the ways in which the discipline contributes to interdisciplinary knowledge production across the humanities and social sciences. Each week, module lectures will provide an introduction to a different sub-disciplinary field, which will be explored with the aid of specific worked examples which encourage students to apply the theoretical issues discussed to 'real world' issues. Assessment is by coursework (mid-term essay) and a written exam (end-of-term).

GLOBAL CHALLENGES: DEVELOPMENT, INEQUALITY, ALTERNATIVES (ENVS144)

Credits: 15 / Semester: semester 2

This module is designed to appeal to students who would like to live in a better world and are interested in exploring and discussing critical approaches to inequality. Students on the module will gain understanding of the multiple and contested ways in which global challenges and international development are defined and studied. This will include critical attention to uneven processes of development over time and space, particularly related to global environmental change, inequality, and health. Similarly, the module provides a solid foundation and analysis of the historical, political, and economic forces related to globalisation. Students will therefore be critically informed about what globalisation produces for differing communities, cultures, and ecosystems. Students will also gain insight into how varying communities in different places are responding to development, globalisation, environmental injustices, and inequality through both resistance and building alternatives.

INTRODUCTION TO CLIMATE CHANGE AND MITIGATION (ENVS189)

Credits: 15 / Semester: semester 2

This module will introduce you to the concept of Earth System interactions as a framework for understanding the causes and consequences of climate change. The module will cover the key features of the earth, atmosphere and ocean, and their interactions. alongside the drivers and consequences for perturbing part of the Earth System. Past, contemporary and projections of climate change will be discussed, as well as the toolkit tools deployed by environmental scientists to detect climate change and show attribute it to be a consequence of human activities. The module will discuss also measures to mitigate against climate change, drawing on the United Nations Framework Convention on Climate Change (UNFCCC) efforts .

Programme details and modules listed are illustrative only and subject to change.

YEAR TWO

In year two, skills development is a central part of the course, including a week-long field class to Lorca, Spain. You can then choose additional modules from a range of physical geography specialisms, including Climatology, Catchment hydrology, Geomorphology: ice, sea and air, and Soils, slopes and the environment, along with human geography modules and those from other disciplines.

NOTICE

Students will take the following compulsory modules and select from the optional modules detailed below.

COMPULSORY MODULES

PHYSICAL GEOGRAPHY FIELDWORK COURSE (ENVS228)

Credits: 15 / Semester: semester 1

The aim of this module is to give physical geography students experience of undertaking fieldwork in an environment and to extend their understanding of processes and characteristics of the environment and how they function and interact in the real-world. In this module students examine all the major components of physical geography and their functioning in the landscape. They investigate the interactions of climate, vegetation, soils, topography and human land use, in different locations. Major themes discussed include impacts of weather and climate, soil and water management, landscape development, as well as natural patterns and variability of characteristics. The students undertake a field project and write an essay on a major theme.

PRINCIPLES AND THEORY IN GEOGRAPHY (ENVS249)

Credits: 15 / Semester: semester 1

The course aims to introduce students to current and historical debates about the nature, purpose and practice of geography. It compliments Research Skills (ENVS203) and provides a background for all modules in Geography. Particular emphasis will be placed upon the philosophical and conceptual developments within Geography as a discipline and the role of 'spatial thinking' in the production of geographical knowledge.

RESEARCH SKILLS (GEOGRAPHY AND ENVIRONMENTAL SCIENCE) (ENVS203)

Credits: 15 / Semester: whole session

The module will develop students' knowledge of careers and employability with a focus on enhancing employability through tutorial-based exercises. In addition, the module provides a range of research skills required for the planning, implementation, analysis and reporting (written and oral) of independent research projects. Practical training will be provided in a range of qualitative and quantitative techniques across a broad range of geographical and environmental science themes. From this, students should develop a critical awareness as to the advantages and disadvantages of research methodologies in particular contexts.

OPTIONAL MODULES

AN INTRODUCTION TO ENVIRONMENTAL HISTORY (ENVS223)

Credits: 15 / Semester: semester 1

This module explores the course of human history, examining the interaction of people with the environment, moving through the different stages of human development, from early agrarian based developments in the Neolithic 9000 years ago, through to modern agricultural practices and landscape management. The following topics and concepts are introduced and examined:

Landscape geography, cultural ecology and environmental history.

Philosophical insights into environmental history, how have societies viewed and understood the environment.

Agriculture and the environment, long term perspectives and present day issues i.e. the environmental impact of hunting and gathering societies.

The agricultural revolution of the Neolithic and its impact, the impact of pre-industrial agriculture and some environmental issues raised by contemporary agriculture.

An ecological history of industrialisation and population growth, i.e. population resources and environment in an industrialised world.

Perils of a restless planet: an introduction to hazard research.

The module uses wide ranging literature and case studies to explore a range of human-environment interactions (fuel, food, water, culture and space), exploring how human activities have modified, and been modified, by their environments, and how sudden changes whether natural or human induced have changed this relationship.

This module has proven popular over the years and is of relevance and interest to both social science and physical science based students.

CATCHMENT HYDROLOGY (ENVS217)

Credits: 15 / Semester: semester 1

The study of catchment hydrology is concerned with water above and below the land surface, its various forms, and its circulation and distribution in time and space within drainage catchments; it is based on fundamental knowledge of the hydrological cycle and its governing factors. Understanding the hydrological cycle is fundamental to physical geography. All life is supported by water and all earth systems incorporate fluxes of water to some extent. The module covers the main hydrological processes operating in drainage catchments in terms of their measurement, operation and controlling factors. The module provide 'hands-on' experience of both observing hydrology and modelling hydrological systems, with an emphasis on applied learning, which might be useful in a vocational sense in the future. The module will aim to deliver excellent training in the knowledge required to work in a wide variety of environmentally-facing careers, including those with the EA, Natural England or DEFRA, as well as Environmental Consultancies.

CHANGING ENVIRONMENTS (ENVS214)

Credits: 15 / Semester: semester 1

The Earth is subject to a myriad of threats and stresses, ranging from a changing global climate to unprecedented scales of human impacts on ecosystems, so that a new geological time period, the Anthropocene was created. Placing future change in freshwater and coastal wetlands and lakes into a long-term context is a critical science, and without it, society cannot constrain the 'natural' baseline against which future changes could be judged. This module will provide a critical insight into the global changes currently impacting the Earth over decades to millennial timescales. We will introduce a series of contemporary environmental concerns, and teach how we can reconstruct climatic and environmental conditions, the landscapes and vegetation of the past. We will explore a wide variety of archives (lakes, freshwater and coastal wetlands, oceans) and develop an understanding of the key techniques used to trace environmental conditions (physical properties, biogeochemistry, biological indicators). We will assess how the drivers behind these changes will affect future landscapes and ecosystems.

CLIMATOLOGY (ENVS231)

Credits: 15 / Semester: semester 2

The module covers energy balance and transfer processes at the surface, clouds, rain formation, weather forecasting, monsoons, tropical cyclones, weather in the mid latitudes, and the regional climates. The module has a balance between theory, processes, impacts, and hands-on experimentation and data analysis.

ENVIRONMENTAL SUSTAINABILITY (ENVS218)

Credits: 15 / Semester: semester 1

Environmental concerns have become increasingly pressing over the last few decades, especially the global challenge of climate change. Environmental sustainability directs our attention to finding new approaches and methods for many of our activities and is an increasingly accepted principle that many professions are seeking to work out in practice.

This module explores the notion of environmental sustainability particularly within the context of urban planning. In this context, it can help us to develop the places where we live in a way that makes them cleaner, more energy efficient and better adapted to climate change, and that provides more biodiversity and a better quality of life. Planners, geographers and environmental scientists can all contribute to achieving a more sustainable world around us.

GEOMORPHOLOGY: ICE, SEA AND AIR (ENVS252)

Credits: 15 / Semester: semester 2

The module develops an understanding of these major geomorphic systems and how they create terrestrial landforms. It explores the basic processes that have helped shaping the geomorphology of Britain and investigates magnitude and frequency of events, as well as time and space scales over which the processes operate.

The module is divided into four components, each composed of 4 sessions: glacial systems, glacial geomorphology and environmental change, aeolian processes, and coastal geomorphology. Weekly face-to-face sessions are supported by access to online videos, power point presentations, lecture notes, reading lists and some selected web sites. Weekly timetabled sessions will be a combination of lectures, discussions around reading and Q&A. Two days of fieldwork form the basis of the summative assessment addressing set problems and questions. A formative GIS exercise is also delivered via timetabled support sessions.

GIS FOR HUMAN GEOGRAPHY (ENVS257)

Credits: 15 / Semester: semester 2

The module introduces the principles of geographical information systems and science with a focus on human geography. Examples will be drawn from population geography with components linked to data sources, analysis and visualisation. Students will learn how to use GIS to map population data, to explore social deprivation, geographic inequalities, and commuting patterns, amongst other themes.

KEY SKILLS FOR ENVIRONMENTAL DATA ANALYSIS (ENVS202)

Credits: 15 / Semester: semester 1

The module provides a generic training in manipulating environmental data sets using the industry-standard Matlab software. Skills are provided in reading in data, manipulating and plotting the data, and interpreting the data signals. The assumption is that students have little or no experience in programming. The module begins with an introduction to Matlab – what it is, what it can do, how to operate it – and then develops a series of programming skills, each week using data collected in the staffs' own research to provide real-world examples of the use of Matlab. The aim is to provide students with sufficient grasp of programming in Matlab to enable its use in subsequent project work, as well as providing the foundations in one of the key tools used in science and industry.

MARINE ECOPHYSIOLOGY, ECOLOGY AND EXPLOITATION (ENVS251)

Credits: 15 / Semester: semester 2

The marine environment presents a particular set of challenges for the organisms which inhabit it and these conditions are constantly changing as a result of human interventions. This module will provide a solid grounding in a number of topics, concepts and issues in the marine environment relating to the physiology and ecology of marine organisms and how they are affected by the activities of humans. Module content will be delivered primarily through interactive lectures supported by computer-based practical exercises and assessed by examination and coursework. Students will be guided to specific sections of textbooks, online resources and scientific papers to shape their learning.

POLITICAL ECONOMIES OF GLOBALISATION (ENVS264)

Credits: 15 / Semester: semester 2

This module introduces students to the study of globalisation in the early 21st century. In the 19th and 20th centuries there were big debates between those who think things work best when people are left to decide how they want to live and get what they need by trading with each other, and those who wanted a communist society where people get what they need and contribute what they can to the common good. Of course it did not work out that way, and now for many people free markets, or neoliberalism is the only serious game in town. The course examines those debates before moving on to examine case studies of how they have worked out in practice.

POPULATION AND SOCIETIES (ENVS221)

Credits: 15 / Semester: semester 1

This module aims to provide a general introduction to the field of population geography, in which a basic demographic understanding of population change is placed within a spatial framework, allowing exploration of the nature and causes of national, societal and cultural differences in these changes. This module is also designed to serve as the foundation block for those interested in pursuing a population geography or GIS/Spatial Analysis 'pathway'.

RURAL GEOGRAPHIES (ENVS227)

Credits: 15 / Semester: semester 1

The overall aims of this module are to help develop a critical awareness of the changes taking place in contemporary rural areas, to stimulate informed debate about the geographical difference and inequalities in rural areas both in the UK and the wider world and to draw attention to, and encourage critique of, the empirical studies and conceptual approaches taken by geographers and social scientists to the study of these issues.

SOCIAL AND CULTURAL GEOGRAPHIES (ENVS275)

Credits: 15 / Semester: semester 2

Social and Cultural Geographies are two diverse, interlinked fields within contemporary human geography. Social geography is, broadly, interested in the relationships between social identities, power and space, and cultural geography examines the ways in which meaning is produced through 'culture' – social ideas, discourse, performances, objects, art, entertainment, images, music etc. This module will introduce you to these broad themes through a focus on the interrelations between identity, space and power and the ways in which these are produced through cultural forms. This includes exploring a range of social differences and identities such as gender, class, disability, sexuality, body size, race and ethnicity, and exploring representations and modes of engaging with the world including online/virtual space, mobilities, music, TV, and material culture.

EXPLORING THE SOCIAL WORLD (ENVS225)

Credits: 15 / Semester: semester 1

This module aims to introduce students to the key methodological debates, and the main qualitative and quantitative methodological techniques that are used in the Social Sciences. In doing so, the module aims to deliver the methods research skills training that will enable students to successfully complete their field classes and dissertations.

MARINE POLLUTION (ENVS232)

Credits: 15 / Semester: semester 2

Students are taught how marine systems are changing due to globally increasing water temperatures and increasing carbon dioxide concentrations in the atmosphere, which are affecting the chemistry, physics and ultimately biology of the marine systems at unprecedented rates. These changes are expected to accelerate in the coming decades. Localised anthropogenic stressors such as excess nutrients, plastic debris, trace metals (e.g. mercury, copper), marine heatwaves and/or other emerging contaminants affecting coastal and open ocean waters are covered. Students will gain an understanding of the causes and processes that drive marine pollution issues as well as techniques used to monitor, remediate and/or regulate those issues. Assessment is done through group work, coursework and a final in-person exam.

PALAEOBIOLOGY AND EVOLUTION (ENVS283)

Credits: 7.5 / Semester: semester 2

Building on the basics of palaeontology covered in ENVS118, this module could be subtitled "palaeontology for palaeontologists" since it covers topics and ideas that are used day-to-day by professional palaeontologists. The module looks at how and where fossils are found, and how they can be prepared, studied and accurately described. The course deals with evolutionary theory and its place in palaeontology, as the student learns how to read and construct evolutionary hypotheses, and describe and understand patterns in the fossil record. In addition the module briefly runs through the evolutionary history of vertebrates, before introducing the main groups of microfossils and their applications. The module comprises ten lectures and five practical sessions. The practicals are a key component of the module and are designed to run alongside and support the lecture material, giving the student the opportunity to more deeply understand the module content. Once the bulk of the practicals are completed, students are required to undertake a group project that brings together much of the course material into a coherent whole.

OCEANOGRAPHY, PLANKTON AND CLIMATE (ENVS245)

Credits: 15 / Semester: semester 1

The tiny plankton are the base of marine food chains and also affect the Earth's climate. If you want to understand how and where these organisms live in the ocean, you need to step out of your own experience as a terrestrial animal and learn how the physics, biology and chemistry of the ocean come together to control the lives of plankton. In this module we will get you to think about how turbulence and stratification in the ocean control the growth of different sizes of plants and animals by determining how they can acquire light, nutrients and food. You will learn how plankton play a key role in shaping Earth's climate, but that this depends on the plankton species and plankton size. We will also consider how plankton respond to changes in Earth's climate, with important shifts in species distributions currently being caused by our warming climate. In this module we take you from the micron scales of the tiniest plankton up to the scale of the global ocean to illustrate the fundamental links between the ocean's physical and biogeochemical processes, plankton communities and Earth's climate. Teaching is structured around a series of short videos on key topics and concepts, with class work then looking at relevant case studies, discussing some of the important implications of our changing climate on plankton, and gaining practice in quantifying plankton responses to changes in their ocean environment. Assessment is by one coursework assignment halfway through the semester, and an online open-book exam.

Programme details and modules listed are illustrative only and subject to change.

YEAR THREE

In year three, you will complete a dissertation, which brings together the skills and techniques you have learned in the degree to produce an independent piece of academic research. There are also opportunities for overseas field study.

NOTICE

Students will select compulsory dissertation or work-based dissertation modules (30 credits) in addition to six (four if taking the optional field class module) of the optional modules detailed below.

COMPULSORY MODULES

DISSERTATION (GEOGRAPHY & ENVIRONMENTAL SCIENCE) (ENVS321)

Credits: 30 / Semester: semester 1

This module provides students with the opportunity to undertake an independent research project into a topic of the choosing, under the supervision of an allocated member of staff.

OPTIONAL MODULES

CLIMATE CHANGE - A CRITICAL REVIEW (ENVS389)

Credits: 15 / Semester: semester 2

This module examines climate change impacts on humans and ecosystems. The module is designed to give the student a good overview of the strength and weaknesses of climate modelling approaches. Elements of the global carbon cycle are discussed.

COASTAL ENVIRONMENTS: SPATIAL AND TEMPORAL CHANGE (ENVS376)

Credits: 15 / Semester: semester 1

This module considers the evolution and response of coastal environments to marine and riverine processes and their variations in relation to past, present and future climate change. Attention is given to physical processes and inter-relationships acting along coastlines and coastal changes in response to sea level rise, variations in storms activity, wave climate and sediment supply. Consideration is also given to coastal management and climate change adaptation and mitigation measures. Topics will be investigated through a combination of lectures, field trips and development of a project aimed at identifying optimum coastal protection schemes for real case studies.

BODIES, SPACE AND POWER (ENVS344)

Credits: 15 / Semester: semester 1

This module aims to give students a sustained and critical understanding of the relationship between bodies, space and power, with a particular focus on critical approaches to public health. Building on ENVS275 Social and Cultural Geographies, the module will provide students with an in-depth engagement with critical theory (particularly feminist and poststructural theory) as applied to contemporary and historical examples surrounding public health.

FLUVIAL ENVIRONMENTS (ENVS372)

Credits: 15 / Semester: semester 2

Fluvial processes are found all over the world and are some of the most important in sculpting the Earth's surface and producing landforms. This module examines fundamental concepts and recent ideas relating to fluvial geomorphology, building on study throughout your educational career. A key point about studying fluvial environments is to understand how the system functions, its links and interactions. It is important to look at all the main components of the system, to understand the dynamics and controls on water and sediment flux and how these produce different types of landforms. The amounts of water and sediment can vary with the environmental conditions and thus study of the drivers of these systems such as climate and human activities and how they have changed over time is essential for being able to interpret the current landscape. Understanding of the present functioning of fluvial systems is essential for any environmental management since rain and runoff are ubiquitous and floods are a major natural hazard.

GEOGRAPHIC DATA SCIENCE (ENVS363)

Credits: 15 / Semester: semester 1

This module will introduce students to the nascent field of Geographic Data Science (GDS), a discipline established at the intersection between Geographic Information Science (GIS) and Data Science. The course covers how the modern GIS toolkit can be integrated with Data Science tools to solve practical real-world problems. Core to the set of employable skills to be taught in this course is an introduction to programming tools for GDS in R and Python. The programme of lectures, guided practical classes and independent study illustrate how and why GDS is useful for social science applications.

BUILDING BETTER WORLDS (ENVS387)

Credits: 15 / Semester: semester 1

Humans have constructed visions of a better world throughout history: in fact, social movement scholars argue that the history of humanity is the history of this struggle. Certain forms of protest have existed throughout time: taking up arms to fight for what you believe in, or to defend a way of life. Some forms of resistance date back centuries: the revolt, the uprising, the rebellion, the strike, the march, the petition, sabotage, etc. More recently, social movements have used social networks and media to create what some argue are new forms of protest. This course surveys how geographers and others have theorised protest, resistance and other strategies for change through a range of approaches and case studies.

GLOBAL CARBON CYCLE (ENVS335)

Credits: 15 / Semester: semester 2

Increasing amounts of carbon dioxide in the atmosphere are having a profound impact on our Earth system. This module will introduce students to the fundamental theory behind the global carbon cycle. Students will see how carbon is partitioned between the atmosphere, land and ocean in the contemporary and past Earth system, understand how the ocean stores 50 times more carbon than the atmosphere, and consider the impact of increasing carbon dioxide on the organisms living on land and in the ocean. Teaching is through lectures, workshops focusing on key components of the carbon cycle, and guided reading. Assessment is by two pieces of coursework.

HUMAN-ENVIRONMENTAL INTERACTIONS (ENVS315)

Credits: 15 / Semester: semester 2

The module aims to demonstrate and explore how both human and physical geographers can combine expertise to work at the intersections of human-environment interactions and environmental humanities. Emphasising the importance of interdisciplinarity, students are introduced to a variety of research areas, such as health studies, data sciences, and climatology to examine the variety of cross-disciplinary and collective approaches to studying environmental science. Through group tutorials, students develop a group project based on their shared interests, culminating in a group presentation and individual essay as part of their assessment.

MARINE ECOLOGY: THEORY AND APPLICATIONS (ENVS383)

Credits: 15 / Semester: semester 2

This module develops the connections between ecological theory and management of marine communities and ecosystems. The theory will mainly focus on mathematical models of the dynamics of populations and communities, and will include practical work with software. The second half of the module aims to give a rounded overview of the current understanding of vulnerability of marine taxa to human activities and climate change, and enable students to evaluate consequences of loss of species on ecosystem structure and functioning, as well as on human wellbeing.

NATURAL HAZARDS AND SOCIETY (ENVS319)

Credits: 15 / Semester: semester 1

This module aims to provide an integrated perspective on a range of natural hazards, the different levels of impact on human societies, and the mitigation and adaptation strategies adopted before, during and after extreme events. At the end of this module students will have an understanding of the physical processes and societal impacts associated with a range of geophysical and meteorological hazards. The course is delivered in a series of lectures supported by tutorial sessions and is assessed by an exam and coursework assignment.

OCEAN DYNAMICS (ENVS332)

Credits: 15 / Semester: semester 1

Ocean dynamics addresses how the ocean and atmosphere circulate. Fundamental questions are addressed, such as how heat, salt, and dissolved substances are transported, how jets and weather systems emerge on our planet, why there are western boundary currents in the ocean, and how seafloor topography shapes the ocean circulation. Students will improve their understanding of how the ocean and atmosphere behave, including comparing the importance of different physical processes in the climate system. The module is delivered via lectures and formative workshops to gain skills at problem solving. There is significant mathematical content, requiring familiarity with calculus and algebra. The module is assessed through two online tests and an essay.

POSTCOLONIAL GEOGRAPHIES (ENVS334)

Credits: 15 / Semester: semester 1

Whilst for many people, colonialism has ended, we live in a world where the effects of colonialism are still visible. Many academics have taken a critical perspective on these continued legacies, and this field of thought is now broadly known as 'postcolonialism'. This module explores the social, political and cultural effects and legacies of colonialism as they occur in particular contexts.

The module is divided into two sections, one exploring the theoretical ideas of postcolonialism, the other looking at how thinking postcolonially helps us to understand the world.

You will be assessed through two pieces of coursework, one a theoretically driven essay on a student-chosen topic, and one, focused on authentic assessment, which analyses the postcolonial aspects of contemporary culture (e.g. a film, book or museum).

SURVIVING THE MARINE ENVIRONMENT: ADAPTATION, BEHAVIOUR AND CONSERVATION (ENVS310)

Credits: 15 / Semester: semester 1

This module aims to foster a broad understanding of contemporary theory in behavioural ecology, evolutionary biology and ecophysiology, with special reference to the marine environment. We will consider processes that operate at scales from individuals to populations and consider implications of these processes for the conservation of marine species and ecosystems. This 15 credit module builds on knowledge acquired about techniques, theory and processes acquired in Year 1 (e.g. Marine Biology: Life in the Seas and Oceans & Marine Ecosystems: Diversity Processes & Threats) and Year 2 (e.g. Marine Ecophysiology, Ecology & Exploitation) and provides the opportunity to experience the integration of current research themes in marine biology.

TEACHING GEOGRAPHY (ENVS308)

Credits: 15 / Semester: whole session

This module is designed to give students experience teaching geography to secondary school pupils, via the mentoring of A-level students Birkenhead Sixth Form College, St. Edward's College and St. Hilda's CE High School and via the delivery of a field and/or class-based learning activity. To support these activities training is provided on campus in Semester 1 in Geography at key stages 3-5, learning and teaching strategies, assessment for learning, fieldwork activities, lesson planning and delivery. Mentoring is undertaken in partner schools and colleges in Semester 2. Students taking this module will need to obtain a DBS Certificate – this will be done through the respective partner School/College.

INTRODUCTION TO QUATERNARY MICROPALAEONTOLOGY (ENVS342)

Credits: 15 / Semester: semester 2

This module intends to give a holistic insight of a number of marine and terrestrial microfossils that are conventionally used for reconstructing past environmental conditions for the Quaternary period, including recent past. Microfossils are biological indicators that can help to either qualitatively and/or quantitatively estimate environmental conditions such as atmospheric temperature and precipitation (pollen), sea-surface conditions (foraminifera, diatoms, radiolarians, dinoflagellate cysts), salinity (ostracods, diatom), pH (diatoms), sea-ice cover (diatoms, dinoflagellate cysts), etc. These conditions are of paramount importance for modelling past climate conditions and the data derived from microfossil assemblages enable to better calibrate models, which in turn, are essential to forecast future climate. In addition, microfossil assemblages help to understand the natural evolution of our environment as well as measuring the amplitude of human activities over time.

CARBON, NUTRIENTS AND CLIMATE CHANGE MITIGATION (ENVS381)

Credits: 15 / Semester: semester 1

The module will involve both individual and group work, workshops, group presentations/debates, and engagement with the most current scientific literature and social media and science communication. This module is open to all students, but those taking this module must be willing to engage in quantitative analyses of carbon and nutrient cycling and its importance to climate mitigation strategies.

GLACIOLOGY PAST, PRESENT AND FUTURE (ENVS330)

Credits: 15 / Semester: semester 1

During this module students will be provided with fully up to date knowledge of how glaciers and ice sheets (1) have behaved in the past; (2) are currently behaving in the present; and (3) will behave in the future. This will be achieved through paired lectures and seminars on different glacial themes, where students will have the opportunity to examine and critique a range of glaciological research techniques that are applied to glacial environments around the world, ranging from valley glaciers to ice sheets. It is intended that this will provide students with a working knowledge of the controls on (and the social and climatic impacts of) past, present and potential future glacier behaviour.

CONTEMPORARY POPULATION DYNAMICS (ENVS311)

Credits: 15 / Semester: semester 2

This course explores contemporary population dynamics across Europe. Students will explore fertility, mortality and migration dynamics across selected countries in Europe; review explanations for population change; and examine the policy challenges posed by such population change. Students will also explore these debates in a local context through a digital field walk in Liverpool, blending traditional approaches with expanded potentials via technology.

SOCIAL AND SPATIAL INEQUALITIES (ENVS357)

Credits: 15 / Semester: semester 2

This module provides insight into social and spatial inequalities, and their inter-relations. The module will consider how and why inequalities might have persisted over time, how social inequalities have specific geographies, and the implications of this unevenness for those who are marginalised. The module is structured through four major themes: for example, inequalities and the labour market; ethnicity and inequalities; spatial understandings of poverty; and theories about inequality. The difficulties in defining and measuring social and spatial inequalities, and how such definitions may relate to broader theories, perspectives or frameworks of relevance are issues covered in the module, as well as how these terms are interpreted and (mis-)represented. The module draws on empirical evidence, theoretical approaches and policy responses. The module provides insight into government responses that aim to combat social and spatial inequalities and related issues in the UK, at the regional and sub-regional level.

POLAND: POLITICAL, SOCIAL AND CULTURAL GEOGRAPHIES SINCE 1939 (ENVS313)

Credits: 15 / Semester: semester 2

This module introduces students to specific geographical developments in Poland since 1939. The course will be structured around three key time periods: second world war, socialism, post-socialism. Within these, shifts in the control and use of space will be explored. The second world war theme will consider the impact of war on population and territory in Poland, and the subsequent contestations surrounding wartime memory within the country, focusing especially on museums and memorial sites as contested sites of memory. The second section of the course will consider the spatial dimensions of everyday life under socialism, including: political uses of public and private space, queuing and the shortage economy, imagined geographies of the west, and resistances. The final section will investigate changes in Poland since 1989: to what extent the country has 'returned to Europe', the impact of shock therapy on social geographies, and how Poland is still working through socialist legacies. Special attention will also be given to Polish migration, before and after EU accession. Ultimately this module enables students to develop an in-depth empirical knowledge of a key site of change in contemporary Europe, while encouraging deep engagement with a range of historical, political, social, cultural and post-socialist geographical readings.

BSC FIELD CLASS (GEOGRAPHY & ENVIRONMENTAL SCIENCE) (ENVS391)

Credits: 15 / Semester: semester 2

This final-year Physical Geography field class is held in the second semester and is taught through a short lecture series that guides groups of students through general field skills, organisation of field work, and safety including risk assessment. The module has been designed to allow students who may not wish to travel or undertake residential fieldwork in Geography to continue to develop their fieldwork and research skills. Assessment is via a group Field Planning and Safety test, group daily Oral Field Reports, and an individual Written Report. Emphasis is placed on field skills, data analysis and presentation, and report writing.

WORK-BASED DISSERTATION (GEOGRAPHY AND ENVIRONMENTAL SCIENCE) (ENVS323)

Credits: 30 / Semester: semester 1

This module provides students with the opportunity to undertake an independent research project into a topic of their choosing, under the supervision of an allocated member of academic staff. Students utilise the research skills developed during Years 1 and 2 of the degree to conduct in-depth research, allowing the development of critical thinking, data collection and analysis skills. Students will also develop transferable skills such as time management, independent working and organisational proficiency. The work-based dissertation additionally involves students in working collaboratively with an external organisation on a mutually agreed research topic, thereby providing students with valuable work-related experience.

FIELD CLASS (ALGARVE, PORTUGAL) (ENVS380)

Credits: 30 / Semester: semester 2

The focus of the module is a field session in the Algarve where students will learn about landscape, land use, vegetation processes, coastal environments in a Mediterranean landscape. The students will carry out research projects in teams that they will have planned in advance. A series of lectures will introduce the physical geography of the region and students will design their own projects under the guidance of staff. The assessment will comprise the project plan, a presentation of the data acquired during the field class and the final project report.

Programme details and modules listed are illustrative only and subject to change.

HOW YOU'LL LEARN

To help you meet the intellectual and practical challenges of studying Geography, our programmes are taught using a student centred approach, involving a range of learning experiences. These include:

- Small tutor groups (typically eight students) through all years
- High levels of field-based learning within the UK and abroad
- An emphasis on active, problem-based learning ('learning by doing')
- Hands-on experience of cutting-edge laboratory technologies in physical geography
- Innovative GIS, statistical and qualitative research methodologies and community consultation in human geography
- Supervised independent and group project work, including (for Single Honours degrees) a final year independent research-based dissertation supervised by a dedicated expert in the field.

A number of the School's degree programmes involve laboratory and fieldwork. The fieldwork is carried out in various locations, ranging from inner city to coastal and mountainous environments. We consider applications from prospective students with disabilities on the same basis as all other students, and reasonable adjustments will be considered to address barriers to access.

HOW YOU'RE ASSESSED

Assessments are designed around developing skills and styles of communication that will be relevant to future employers. So, in addition to exams and essays, you will also undertake assessments that include computer-based exercises, oral presentations, policy briefs, field projects, and research reports. Single Honours Geography students complete a compulsory 10,000-word dissertation in their final year on a topic of their choice. This is your opportunity to develop skills as an independent academic researcher, supported on a one-to-one basis by an expert in the field.

LIVERPOOL HALLMARKS

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.



Careers and employability

Geography is a subject that bridges the social and physical sciences. Those studying geography develop transferable knowledge and skills which open up a wide range of career opportunities.

By the time you graduate you will have developed core research skills in human geography, including surveying, interviewing and innovative community liaison techniques stand students in good stead for a range of employment destinations.

You can explore the following work experience opportunities:

- Internships during the course of their degree.
- Work-based dissertation – which combines the final year independent research project with a placement in industry.

Students can also continue their studies at postgraduate level and PhD study with opportunities to apply for funding from a range of organisations, including the ESRC (Economic and Social Research Council) and NERC (Natural Environment Research Council). Geography is a subject that bridges the social and physical sciences. Those studying geography develop transferable knowledge and skills which open up a wide range of career opportunities.

By the time you graduate you will have developed core research skills in human geography, including surveying, interviewing and innovative community liaison techniques stand students in good stead for a range of employment destinations.

WORK EXPERIENCE OPPORTUNITIES

We encourage students to undertake work experience and internships during the course of their degree. Our students can also select a work-based dissertation, which combines the final year independent research project with a placement in industry.

Students can also continue their studies at postgraduate level and PhD study with opportunities to apply for funding from a range of organisations, including the ESRC (Economic and Social Research Council) and NERC (Natural Environment Research Council).

90% OF GEOGRAPHY AND PLANNING STUDENTS ARE IN WORK AND/OR FURTHER STUDY 15 MONTHS AFTER GRADUATION.

Discover Uni, 2018-19.

Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

TUITION FEES

UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)	
Full-time place, per year	£9,250

International fees	
Full-time place, per year	£27,200

Fees are correct for the academic year 2024/25

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. [Learn more about tuition fees, funding and student finance.](#)

ADDITIONAL COSTS

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This includes the cost of your dissertation/project, and optional field classes in year three.

Find out more about the [additional study costs](#) that may apply to this course.

SCHOLARSHIPS AND BURSARIES

We offer a range of scholarships and bursaries to provide tuition fee discounts and help with living expenses while at university.

Check out our [Undergraduate Global Advancement Scholarship](#). This offers a tuition fee discount of up to £5,000 for eligible students starting an undergraduate degree from September 2024. There's also [the Liverpool Bursary](#) which is worth £2,000 per year for eligible students.

[Discover our full range of undergraduate scholarships and bursaries](#)

Entry requirements

The qualifications and exam results you'll need to apply for this course.

Your qualification	Requirements About our typical entry requirements
A levels	<p>ABB</p> <p>Narrowly missed the entry requirements on results day?</p> <div style="border: 1px solid #ccc; padding: 5px; text-align: center;">If you've studied these subjects, we may take them into account.</div> <p>Applicants with the Extended Project Qualification (EPQ) are eligible for a reduction in grade requirements. For this course, the offer is BBB with A in the EPQ.</p> <p>You may automatically qualify for reduced entry requirements through our contextual offers scheme.</p> <p>If you don't meet the entry requirements, you may be able to complete a foundation year which would allow you to progress to this course.</p> <p>Available foundation years:</p> <ul style="list-style-type: none">• Geography BSc (Hons) (4 year route including a foundation year at Carmel College), BSc (Hons)
GCSE	4/C in English and 4/C in Mathematics
Subject requirements	For applicants from England: Where a science has been taken at A level (Chemistry, Biology, Geology or Physics), a pass in the Science practical of each subject will be required.
BTEC Level 3 National Extended Diploma	D*DD in a relevant subject.
International Baccalaureate	33 points, with no score less than 4.

Your qualification	Requirements About our typical entry requirements
Irish Leaving Certificate	H1, H2, H2, H2, H3, H3
Scottish Higher/Advanced Higher	Not accepted without Advanced Highers at grades ABB.
Welsh Baccalaureate Advanced	Accepted at grade B, including 2 A levels at AB.
Access	45 Level 3 credits in graded units in a relevant Diploma, including 30 at Distinction and a further 15 with at least Merit.
International qualifications	Many countries have a different education system to that of the UK, meaning your qualifications may not meet our entry requirements. Completing your Foundation Certificate, such as that offered by the University of Liverpool International College , means you're guaranteed a place on your chosen course.

ALTERNATIVE ENTRY REQUIREMENTS

- If your qualification isn't listed here, or you're taking a combination of qualifications, [contact us](#) for advice
- [Applications from mature students](#) are welcome.

THE ORIGINAL

REDBRICK

