11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. The programme outcomes have references to the benchmark statements for Geography.

Knowledge and Understanding

On completing the programme students should:

A1. Understand the place of physical geography in contributing a holistic perspective on the natural world, interactions, and processes that are distinctive of physical geography
compared with other disciplines. Students will understand the complex relationships between aspects of environments and landscapes.

A2. Demonstrate knowledge and explanations of spatial distributions in physical phenomena, explain the pattern and dynamic nature of spatial variations in earth surface processes, water, landforms, climate, vegetation and soils

A3. Have an appreciation of temporal change as central to an understanding of the physical world, their development, interaction and interdependence, understanding the dynamics and rates of change at different temporal and spatial scales and evaluate the processes shaping the geographies of the past, present and future, and evaluate modelling approaches that can help predict future change and strategies to mitigate negative impacts of change on society

A4. Have a critical awareness of the significance of spatial and temporal scale for natural processes, and their interactions and analysis

A5. Understand the way in which the distinctiveness of a particular place is constituted and remade by physical processes is understood by geographers, as is the influence of place-specific characteristics on such processes and how these may change through time

A6. Use critically a systems framework to conceptualise patterns, processes, interactions and change in the physical world

A7. Have a clear understanding of the drivers of change in the natural world over space and time, demonstrating knowledge of the interactions between climate, ecosystems and landscapes, understanding controls on fluxes of energy and matter within and between the earth’s surface and the atmosphere

A8. Have a critical understanding of the history of the subject and be aware of how changes in the subject itself have influenced its development

A9. Show knowledge and critical understanding of the diverse manners of representation of the physical world, including maps as well as other representational forms, including texts, visual images and digital technologies

A10. Have a grasp of the principles of research design, the main methodological strategies used in the analysis and interpretation of geographical information, and show a critical understanding of the appropriate contexts of their use

A11. Have skills in the presentation, interpretation, analysis and communication of quantitative data, be familiar with a range of statistical techniques, understand the principles of research design and ways to collect data, the retrieval and manipulation of secondary data sets, geospatial technologies such as digital cartography, GIS and remote sensing and geolocated data.

A12. Have experience of working in the field, including planning, undertaking and reporting significant fieldwork, understanding relevant methods and strategies for field-based research in human and/or physical geography, and being able to take a critical view on the challenges and opportunities fieldwork presents

Teaching and Learning Methods

Geographical knowledge and understanding (A1-A12) are acquired throughout the curriculum through an emphasis on field-based and experiential learning alongside a mix of well-established and more experimental teaching and learning practices including: lectures, tutorials, staff and student-led seminars, guided independent study, oral and poster presentations and teamwork. This mix of cognate and experiential teaching and learning promotes creativity, critical thinking, active learning, problem setting and problem posing, information literacy, numeracy and spatial awareness.

The compulsory Stage 1 programme introduces and begins to develop the main themes of the degree (A1-A12) whilst an overview of disciplinary thought and practice (A10), more advanced methodological knowledge (A11), and fieldwork opportunities (A12) are provided in core Stage 2 modules. During Stages 2 and 3 students are enabled to follow particular pathways through the degree programme, specialising in physical geography (A1-4, A7, A9).

Assessment Strategy

Knowledge and understanding (A1-A11) are assessed by combinations of examinations (seen and unseen, including computer-aided assessments) and coursework (including
essays, individual and group projects, dissertations, practical reports, oral presentations, poster presentations, portfolios and field-based project work).

Examinations are primarily intended to assess knowledge of core information while written and oral coursework places more emphasis on the development of critical analysis and understanding of the concepts within a wider geographical context. Fieldwork is central to the aims of the degree programme. Field-based project work (A12), and individual and group presentations emphasise effective communication, data synthesis, personal enterprise, innovation, creativity and teamwork.

**Intellectual Skills**

On completing the programme students should be able to:

B1. Bring together perspectives from multiple subject areas, think laterally across debates, synthesise materials, and hold ideas in creative tension
B2. Use a variety of sources of evidence and apply appropriate forms of both quantitative and qualitative analysis
B3. Judge the appropriate spatial and temporal scales for the purpose of their analysis
B4. Understand the appropriate context for the use of specific quantitative and qualitative techniques
B5. Assess the merits of contracting theories and explanations
B6. Critically evaluate, interpret and combine different types of geographical evidence (for example texts, imagery, archival data, maps, digitised and laboratory data
B7. Recognise the moral, ethical and safety issues involved in all aspects of geographical enquiry

**Teaching and Learning Methods**

Intellectual skills are introduced in Stage 1 modules (B2-B4) and developed to advanced levels through Stages 2 and 3 (B1-B7). Seminars, projects, and group work provide opportunities for students to discuss and learn to evaluate arguments, perspectives and evidence whilst fieldwork, especially the dissertation, promotes opportunities to utilise and develop data collection and analysis skills in concert with a critique of relevant debates and contrasting theories and explanations.

**Assessment Strategy**

Intellectual skills are assessed throughout the degree programme by coursework essays, field-based projects, case studies, textual and visual analysis, quantitative and qualitative data collection and analysis, and laboratory practicals (B1-B7). Unseen examinations assess understanding of key conceptual and theoretical understanding and its application to geographical evidence to form arguments (B5, B7). The Stage 3 dissertation provides the means for demonstrating a significant number of intellectual skills at an advanced level (B1-B7).

**Practical Skills**

On completing the programme students should be able to:

C1. Plan, design and execute a piece of rigorous research or enquiry, both independently and in groups, including the production of a final report
C2. Handle large datasets and display numerical and statistical literacy
C3. Generate, collect, record, and analyse a range of primary and secondary datasets (both qualitative and quantitative)
C4. Employ a variety of science laboratory skills and methods
C5. Engage in autonomous learning and metacognition
C6. Identify, retrieve, sort and exchange geographical information using a wider range of sources
## Teaching and Learning Methods

Practical skills are introduced and developed in dedicated Stage 1 and 2 modules (C2-C6), and are developed to an advanced level in optional modules and the dissertation at Stage 3 (C1-C6). Teaching and learning methods employed include lectures, seminars, computer-based activities, laboratory practicals, and compulsory field-based experiential learning at Stages 1 and 2.

## Assessment Strategy

Practical skills are assessed in stages 1 and 2 through written assessments, oral and poster presentations, fieldwork and laboratory reports, and written and computer-aided examinations (C2-C6). At Stage 3 the dissertation provides an opportunity to assess the full range of these skills (C1-C6). Students are also enabled to take work-based learning modules, which offer additional opportunities to learn and practice a range of practical skills.

## Transferable/Key Skills

On completing the programme students should be able to:

<table>
<thead>
<tr>
<th>Number</th>
<th>Skill Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Synthesise, contextualise and critically evaluate information of different styles and from different sources</td>
</tr>
<tr>
<td>D2</td>
<td>Work in groups and teams recognising the viewpoints and attributes of others</td>
</tr>
<tr>
<td>D3</td>
<td>Display adept information handling and retrieval skills</td>
</tr>
<tr>
<td>D4</td>
<td>Communicate through oral, written and graphic media, and understand how to communicate in a format appropriate to the audience</td>
</tr>
<tr>
<td>D5</td>
<td>Manage time effectively and efficiently, show initiative and organise work effectively</td>
</tr>
<tr>
<td>D6</td>
<td>Use information technology effectively and creatively with full regard to the ethical and quality control issues of knowledge production and communication (including use of spreadsheet, database and word processing programs, internet and email)</td>
</tr>
<tr>
<td>D7</td>
<td>Work responsibly, with self-awareness and self-management</td>
</tr>
<tr>
<td>D8</td>
<td>Have intellectual integrity, and awareness of their responsibility as a local, national and international citizen with a global perspective</td>
</tr>
<tr>
<td>D9</td>
<td>Show flexibility and adaptability and a creative approach to problem solving</td>
</tr>
</tbody>
</table>

## Teaching and Learning Methods

Opportunities to reflect on the development of transferable skills is provided to students at all stages, including access to employability-focused assessments and a related website. At Stage 1 a dedicated module focuses on developing graduate-level transferable skills (D2, D4-D9), which are reinforced in modules at Stage 2 and 3 (D1-D9). Communication skills (D4) are developed in written coursework and examinations, oral and poster presentations (also D3, D5, D9) and via the dissertation (D1, D3-D9).

## Assessment Strategy

Transferable skills are assessed specifically at stage 1 through written, poster and oral presentations (D2-D5), and students are enabled to reflect on their transferable skills development in formative assessments at Stages 1 and 2. At Stage 2 many of these skills are honed through the compulsory overseas fieldtrip modules, as well as being enabled through opportunities to take the career development module (D1-7, D9). The dissertation provides the opportunity to synthesise and assess across the range of transferable skills (D1, D3-9), and Stage 3 modules provide further opportunities to develop key skills (D1-D9).
12 Programme Curriculum, Structure and Features

Basic structure of the programme

The programme is studied over three years full time and is undertaken in three stages (one per year of study). Each stage is delivered through two 15 week semesters over three terms. The programme is divided into modules, with the standard credit weighting for a Geography module being 20 credits. Students study for a total of 120 credits each year. Each 20 credit module represents approximately 200 hours of student learning, activity and assessment, including a minimum of 36 hours of contact.

Stage 1 of the programme provides a foundation in skills and methods appropriate to the study of physical geography, and introduces the key themes of physical geography (as listed above and found in the QAA Geography benchmark statement December 2014). All students follow a compulsory, core, module programme accounting for all 120 credits at Stage 1.

Stage 2 of the programme centres around 60 credits of compulsory advanced physical geography methods and skills development, and an introduction to different approaches traditions within Geography, in preparation for the Stage 3 dissertation. All students must choose to attend one of our compulsory 20 credit overseas fieldtrips, and then choose an additional 40 credits of optional modules from within Geography and/or CEG. These modules are designed to advance students’ geographical knowledge from the introductory Stage 1 material to degree level. A total of 20 credits at Stage 2 may be chosen from other cognate disciplines elsewhere in the faculty or university with the approval of the Degree Programme Director. There is an increased flexibility and choice of modules at Stage 2 to enable students to begin to focus on their key geographical interests.

Stage 3 of the programme offers a high degree of flexibility, requiring students to take one compulsory module; the dissertation (worth 40 credits) and offering a wide range of modules of which they must choose 80 credits worth. Stage 3 modules provide research-led teaching, enabling them to engage with cutting edge research, and to further focus on their key areas of interest. This approach enables students to develop a tailored programme of study that is both coherent as a physical geography degree, yet flexible enough to meet individual research interests, abilities and future employability requirements. Further development of work-based skills is facilitated by optional external modules in student tutoring and learning from work.

Key features of the programme (including what makes the programme distinctive)

- The programme provides a broad foundation in physical geography and then allows students the opportunity to specialise in particular aspects of physical geography.
- Students experience and engage with research-led teaching, including lectures, practical and field-based experiential learning opportunities
- The compulsory Stage 3 dissertation provides students with first-hand experience of conducting and reporting on original geographical research
- All students are required to undertake fieldwork in the UK and abroad, including fieldwork to locations within Europe (such as Ireland or Iceland) and further afield (such as Morocco or New Zealand)
- Students have the opportunity to spend one semester, at either Stage 2 or 3, studying abroad in Europe, North America, or Australasia

Programme regulations (link to on-line version)

FH82 Programme Regulations 21-22

13 Support for Student Learning

Generic information regarding University provision is available at the following link.

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf
Discipline-specific resources provided by the School of GPS include the following:

- Laboratory space and equipment supporting a wide range of analytical facilities (including grain size, water and sediment geochemistry and microfossil analysis) appropriate to physical geography modules and dissertation study, including a dedicated teaching room, fully refurbished geomorphology laboratory and a microscope room (with a dedicated computer and image processing and analysis software) in the Daysh Building. Laboratory facilities are supported by two technicians.

- Physical geography fieldwork equipment appropriate for sediment coring, sampling and analysis, field survey (including levels, theodolites and GPS sets), hydrological analysis and water sampling and assessment. Two inflatable boats (with appropriate safety equipment) facilitate extraction of lake sediment and water samples. Additional field survey equipment may be obtained from the School of Civil Engineering and Geosciences.

Careers advice
Careers advice is an integral part of induction programmes for new and returning students, while students have access to the Careers Service and are encouraged to use it throughout their degree programme. Careers advisors may be consulted via an appointment system and students are also encouraged to attend employer sessions and careers workshops at the University.

14 Methods for evaluating and improving the quality and standards of teaching and learning

Generic information regarding University provision is available at the following link.

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

Accreditation reports
N/A

Additional mechanisms
N/A

15 Regulation of assessment

Generic information regarding University provision is available at the following link.

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

In addition, information relating to the programme is provided in:

The University Prospectus (see http://www.ncl.ac.uk/undergraduate/)

Degree Programme and University Regulations: https://www.ncl.ac.uk/regulations/docs/

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.