



Programme Specification

PHYSICAL GEOGRAPHY

School of Physical and Geographical Sciences

Programme Specification for PHYSICAL GEOGRAPHY as a Principal Subject in a Dual Honours or Major/Minor undergraduate programme leading to the degree of B.Sc. (Honours). Updated 29th June, 2011.

Introduction

This is the definitive summary of the structure and content of the Physical Geography degree programme, and is intended for the use of current and potential students. It explains what should be achieved by a typical student taking full advantage of the learning opportunities provided. Further information can be found in the course handbooks and online at <http://www.keele.ac.uk/eesg/physicalgeography/>.

Name of programme:	Physical Geography
Name of award:	BSc (Hons)
Programme type:	Either Dual Honours or Major/Minor
Mode of study:	Full time
Duration of programme:	3 Years

What are the Dual Honours and Major/Minor Physical Geography routes?

Keele offers a broad undergraduate curriculum based on a Dual Honours system, which allows students to study two subjects in combination to Honours level. The following options are available in Physical Geography:

Dual Honours: two subjects (Physical Geography plus another subject) are studied in combination for three years. Students can achieve a Dual Honours degree of BSc (Hons) in "Physical Geography *and* the other subject".

Major/Minor: two subjects are studied in combination for the first two years, but in the third year students study only Physical Geography. The final degree will be a BSc (Hons) in Physical Geography *with* the other subject. (Students in some subject combinations may also be able to take Physical Geography as the Minor route, studying only the other subject in the third year.)

What is our overall aim and approach?

Physical Geography at Keele explores the Earth's varied landscapes and the complex, potentially fragile, global systems that connect them. As a student at Keele you will learn about the rapidly evolving science at the heart of global environmental change and discover new ways of understanding and appreciating the natural world around us. What you learn here will equip you for future employment and for a lifelong appreciation of the world around you.

The programme aims to enable students to:

- establish a sound knowledge and understanding of the discipline that will serve as a basis for employment, postgraduate research or advanced study;
- explore the key elements of current knowledge and understanding of subjects within Physical Geography, including the research foundations and reliability of that knowledge and understanding;
- acquire a range of practical and technical skills and techniques appropriate to Physical Geography, and to use these skills to tackle geographical issues;
- make critical assessments of sources of information, to engage successfully in independent research, and to communicate ideas concisely and effectively;
- achieve a knowledge and understanding of a range of different approaches to Physical Geography, while recognising both the diversity of the discipline and its unifying themes;
- become expert in specific areas of the discipline that particularly interest them or have particular relevance to intended future employment.

The Physical Geography programme aligns itself closely with key aspects of Keele's distinctive curriculum, including Interdisciplinarity, sustainability, internationality and employability:

Interdisciplinarity

Physical Geography is an explicitly interdisciplinary subject synthesising material from areas such as geology, biology and meteorology to achieve a holistic engagement with Earth's surface and near-surface environments. Taught by a range of expert staff with specialisms ranging from glaciology and paleoecology to social policy and anthropology, and taking advantage of close collaboration with other courses such as Geology and Environmental Science, Physical Geography at Keele adopts an interdisciplinary approach to teaching and encourages an interdisciplinary attitude in students and graduates. All students have the opportunity to combine Physical Geography with another subject in a Dual Honours programme, and even our most specialised Physical Geography modules allow students to identify and explore connections with other disciplines both in research and in the application of Physical Geography subject knowledge to specific real-world problems such as resource management and hazard mitigation. We offer core introductory lectures addressing interdisciplinarity in esc-10039, modules explicitly combining diverse disciplines (eg Geomorphology with Meteorology in esc-20050), module topics requiring interdisciplinary analysis (eg Water Resources esc-30020), modules integrating students from different programmes in joint exercises (eg Natural Hazards esc-30009), guest teaching in Physical Geography modules by staff from other subject areas and opportunities for extended interdisciplinary research project in Dissertation modules.

Sustainability

Interactions between people and their environment are at the heart of Physical Geography, and the subject engages directly with challenges such as climate change, food security and energy choices. The subject matter and approach of Physical Geography is clearly aligned with two of the core areas of sustainability identified by Bone and Agombar, HEA, 2011: living within environmental limits and using sound science responsibly. The HEFCE (2008) strategic review asserted that “*Teaching (or research) that is significant for sustainable development will include a significant element related to either or both of the natural environment and natural resources, PLUS a significant element related to either or both of economic or social issues.*” Physical Geography clearly addresses both the natural environment and natural resources, and also puts those issues clearly into the context of economic and social issues. For example, all students take module esc-10041 (People and Environment) that specifically explores those connections in the first year of the course, and module esc-10038 (Practice of Physical Geography) in which we explore issues such as the wide ranging impacts of major geo-engineering works (landfills, reservoirs, etc). Specialist modules such as Global Environmental Change (esc-30018) and Glaciers & Glacial Geomorphology (esc-30006) engage with the implications of economic developments on the natural environment. Many of our students take the opportunity to combine Physical Geography in a dual honours combination with another environmental discipline to expand their engagement with these issues.

Internationality

Physical Geography is about the whole Earth as a global system and as a home to humankind. It is at its very core about achieving an insight into the way the world works that transcends physical and political boundaries and gives students a thorough appreciation of the international global context of local issues. Physical Geography as a scientific and applied discipline is conducted as an international enterprise by scientists and practitioners from across the globe, and Physical Geography students will engage with their work to encounter international case studies, people and issues. In some topics, such as attitudes to the exploitation of Arctic resources, conflicting opinions are based on national affiliations or local contexts, and students are required to understand how those different international perspectives influence attitudes to the environment in their field of study. Many topics in Physical Geography are explicitly transnational (eg Global Environmental Change, module esc-30018), and our teaching explicitly requires students to take an international perspective to scientific and applied issues. All Physical Geography students take part in an overseas field course, all are encouraged to consider opportunities for periods of international study, and all have the opportunity to engage in international work in their final-year dissertation project. Physical Geography at Keele focuses on the global context of local issues, and all students encounter transnational topics and international practitioners on a global stage.

Employability

Physical Geography students acquire a wide range of skills that are directly relevant both in vocationally specific Geographical careers and in non-Geography employment. Career-relevance is embedded within our course, parts of which (eg 2nd-year practical programme) were developed in consultation with industrial partners to ensure that employability skills were

included. In evidence to the UK Parliament Commons Select Committee on Business Innovation and Skills in 2010, Richard Waite, Managing Director of ESRI UK, said that *“Studying geography and learning how to utilise geographic information gives new employees many of the key skills that businesses are crying out for... But if business needs geographers now, this will be even more true in the future. Location is becoming increasingly recognised as an important factor in decision making.”* *“A survey of 200 business leaders across the public and private sectors showed that the skills they are looking for in future employees are critical thinking (nominated by 78 per cent of businesses leaders as key for graduates), advanced analytical skills (76 per cent), understanding and interpreting complex data (71 per cent), advanced technology skills (57 per cent) ... all of which can be gained through a geography degree... As a company we therefore place a high value on the teaching of geography in Higher Education. ...there is evidence that the generic skills acquired through the study of geography are in high demand right across the business sector.”* Richard Waite, Managing Director ESRI UK
<https://www.esriuk.com/aboutesriuk/pressreleases.asp?pid=647>

How is the Programme taught?

Physical Geography is a modular programme taught within the School of Physical and Geographical Sciences, which includes about 25 lecturers with expertise in Geography, Earth Sciences and Environmental Sciences. All the Physical Geography lecturers hold PhDs and most are internationally recognised experts in their fields. Physical Geographers have won the annual Keele University “Excellence in Teaching” award five times, including both individual awards for excellence in teaching to four members of staff and a team award for excellence to the whole programme.

Qualifications of Physical Geography staff include Chartered Geographer, Fellow of the Royal Geographical Society, Fellow of the Higher Education Academy and National Teaching Fellow.

Staff details are available at <http://www.keele.ac.uk/eesg/people/> .

Learning and teaching methods vary according to the subject matter and level of the module, and include:

- Lectures and tutorials
- Field courses and practical classes
- Seminars, group presentations and workshops
- Individual progress interviews, including personal development planning
- Directed reading and independent study
- Project work and a research dissertation
- Interactive on-line e-learning via the *Keele Virtual Learning Environment* (KLE)

What is the Structure of the Programme?

The Physical Geography programme is modular in structure. In years 1 and 2 students must combine Physical Geography with another principal subject. In year 3 students may continue with the dual honours route or may drop their other subject to continue with Physical Geography as a major route (no other subject in year 3).

The course provides a broad-based first year followed by more specialised second year and third-year studies. We assume no prior expertise in Physical Geography, and begin with introductory modules that provide a platform from which students can develop their knowledge, understanding and skills. First year is an introductory year in which students acquire essential academic skills and a foundation of knowledge of the underlying concepts and principles of the subject. Second year develops a critical understanding of more advanced topics and conceptual issues in the subject, and helps students to establish skills in independent research. Third year allows students to explore specialised topics of their choice at the level of the most recent scientific research, and to develop a range of advanced skills.

FIRST YEAR Four compulsory modules. 60 credits. 38% exam, 62% coursework. Students take all 4 modules: ESC-10039 <u>and</u> ESC-10035 <u>and</u> ESC-10038 <u>and</u> ESC-10041.					
Semester 1					
Module	Title	Credit	Format	Exam	Coursework
ESC-10039	Fundamentals of Physical Geography	15	Lectures	Exam 50%	1 1500-word essay (20%) 3 class exercises (5% each) 3 VLE exercises (5% each)
ESC-10035	Geographical Skills (first half)	Module runs through both semesters, including weekly tutorials and practical classes in this first semester. See details below.			
Semester 2					
ESC-10038	The Practice of Physical Geography	15	Lectures & 1-day field trip	Exam 50%	1 1500-word essay (20%) 2 class exercises (5% each) 2 VLE exercises (5% each) 1 field exercise (10%)
ESC-10041	People and the Environment	15	Lectures	Exam 50%	1 2000-word essay (30%) 2 short exercises (10% each)
ESC-10035	Geographical Skills (second half)	15	Practicals, tutorials & fieldcourse	None	Weekly tutorials (30%) Weekly practical classes (40%) 5 field days (30%)

SECOND YEAR Optional units within 4 compulsory modules. 60 credits. 12.5% exam, 87.5% coursework. Students take all 4 modules listed: ESC-20050 <u>and</u> ESC-20009 <u>and</u> ESC-20030 <u>and</u> GEG-20009					
Semester 1					
Module	Title	Credit	Format	Exam	Coursework
ESC-20050	Dynamic Geographies	15	Lectures	None	100% - number & style depend on options chosen. Equivalent to 2x2500-word essays.

ESC-20029	Practical Physical Geography	15	Practicals & tutorials	None	4 tutorial exercises (8% each) Field project portfolio (33%) GIS practical exercise (35%)
Semester 2					
ESC-20030	Regional Landsystems	15	Lectures & Tutorials	Exam 50%	2 tutorial exercises (10% each) 1 1500-word essay or equivalent poster or web-page (30%)
GEG-20009	Geographical Research Training	15	Practicals & overseas fieldcourse	None	1 practical exercise (20%) 1 dissertation proposal (20%) Fieldcourse (60%)

THIRD YEAR (Dual Honours route)

A dissertation + option modules to a total of 60 credits. 12.5-37.5% exam, 62.5-87.5% coursework.

Students take either GEG-30006 plus 2 additional modules or GEG-30008 plus 3 additional modules.

Module	Title	Credit	Format	Exam	Coursework
GEG-30006	Double Dissertation	30	Dissertation	None	Dissertation (100%)
GEG-30008	Single Dissertation	15	Dissertation	None	Dissertation (100%)
ESC-30006	Glaciers and Glacial Geomorphology	15	Lectures	Exam 50%	1 1500-word essay or web-page (30%) 2 VLE exercises (10% each)
ESC-30018	Global Environmental Change	15	Lectures	Exam 50%	1 1500-word essay (30%) 2 VLE exercises (10% each)
ESC-30020	Water Resources	15	Lectures	Exam 50%	1 technical report (50%)
ESC-30009	Natural Hazards	15	Lectures & workshops	Exam 50%	1 poster (20%) 1 technical report (20%) 1 oral presentation (10%)
GEG-30014	Inspirational Landscapes	15	Lectures	None	1 Project Proposal (20%) 1 Online exercise (20%) 1 Project Report (60%)
ESC-30017	Applied Environmental GIS	15	Lectures & practicals	Exam 50%	1 small-group project (40%) Tutorial exercises (10%)
ESC-30027	Coastal Environments	15	Lectures	Exam 50%	1 Poster presentation (30%) 1 in-class exercise 20%

THIRD YEAR (Major route)

Double dissertation + option modules to a total of 120 credits. 31-37.5% exam, 62.5-69% coursework.

Students take GEG-30006 plus 6 additional modules (or exceptionally GEG-30008 plus 7 others).

Module	Title	Credit	Format	Exam	Coursework
GEG-30006	Double Dissertation	30	Dissertation	None	Dissertation (100%)
ESC-30006	Glaciers and Glacial Geomorphology	15	Lectures and online activities	Exam 50%	1 1500-word essay or web-page (30%) 2 VLE exercises (10% each)
ESC-30018	Global Environmental Change	15	Lectures	Exam 50%	1 1500-word essay, poster or web-page (30%) 2 VLE exercises (10% each)
ESC-30020	Water Resources	15	Lectures	Exam 50%	1 technical report (50%)

ESC-30009	Natural Hazards	15	Lectures & workshops	Exam 50%	1 poster (20%) 1 technical report (20%) 1 oral presentation (10%)
GEG-30014	Inspirational Landscapes	15	Lectures	None	1 Project Proposal (20%) 1 Online exercise (20%) 1 Project Report (60%)
ESC-30017	Applied Environmental GIS	15	Lectures & practicals	Exam 50%	1 small-group project (40%) Tutorial exercises (10%)
ESC-30027	Coastal Environments	15	Lectures	Exam 50%	1 Poster presentation (30%) 1 in-class exercise 20%
Others	By arrangement with the course director, other appropriate modules up to a value of 15 credits from cognate disciplines such as Geology, Environmental Sciences or Life Sciences might be taken as part of the level-3 programme in Physical Geography instead of one of those listed above. At least 105 credits must be derived from level 3 modules listed above.				

How is the Programme assessed?

Assessment involves:

- **Diagnostic Assessments:** These are used to determine students' prior knowledge and ability before a section of the course. They do not count towards students' marks, but help to ensure that teaching is well-targeted and appropriate for students' needs.
- **Formative Assessments:** These are designed to inform students of their progress and to encourage them to reflect on their developing subject knowledge and understanding. They take place during the running of a module and are not used as a part of students' formal assessment mark for the module.
- **Summative Assessments:** These are used to return a formal assessment mark. They are normally derived from examinations and/or continuous assessment of course work throughout the module. Summative assessment marks from levels 2 and 3 count towards the final degree score.

The Physical Geography degree programme uses a diverse range of assessments that are aligned with the intended learning outcomes of the relevant modules and enable students to develop a broad range of both generic and subject-specific skills. Students are always provided with either oral or written feedback to explain the reason behind the mark awarded and to highlight areas of potential improvement. Students are always encouraged to discuss their assessed work with staff if they required additional feedback. The assessment modes used within the programme include:

- End-of-semester examinations
- Essays, reflective diaries and technical reports
- Maps and Poster presentations
- In-class and online exercises
- Individual or group talks
- Field course notebooks and portfolios
- Research proposals
- Independent project work

Exams make up 21-29% of the total assessment over all three years, and 12.5-37.5% of the 3rd-year assessment, depending on route and module choice.

Assessment within the Physical Geography programme has been designed with reference to the best practice identified in the University's Assessment Strategy:
<http://www.keele.ac.uk/depts/aa/landt/assessing.htm>

The conduct of these assessments is governed by the University's Regulations on University Examinations and Assessments (Regulation 8):
<http://www.keele.ac.uk/regulations/regulation8/>

Further information on assessment can be found via the following links:

University Code of Practice on Assessment:

<http://www.keele.ac.uk/depts/aa/newacadregpages/copassessment.htm>

University Marking criteria:

<http://www.keele.ac.uk/depts/aa/newacadregpages/markin%20criteria.htm>

University Degree classification:

<http://www.keele.ac.uk/depts/aa/newacadregpages/degreeclass.htm>

What will students learn in each year?

FIRST YEAR. In the first year students acquire essential academic skills and a foundation of knowledge of the underlying concepts and principles of the subject.		
First Year Material	Modules	Assessments
Knowledge and understanding of core Physical Geography topics and concepts.	Lecture modules.	Essays, short-answer tests and unseen exams.
Fundamental skills and techniques in practical Physical Geography, including fieldwork.	Practical and fieldwork classes	Practical assignments and fieldwork exercises.
Essential study and communications skills.	Weekly tutorials	Essays, oral presentations and written exercises.

SECOND YEAR. In second year students develop a critical understanding of more advanced topics and conceptual issues, and establish skills in independent research.		
Second Year Material	Modules	Assessments
Knowledge and understanding of advanced Physical Geography topics and concepts.	Lecture modules with option-based content.	A flexible mix of essays, posters, scrapbooks, websites, etc; short-answer tests; unseen exams.
Advanced skills and techniques in practical Physical Geography, including fieldwork.	Practical and fieldwork classes including one overseas fieldcourse	Practical assignments, technical report, and fieldwork exercises.
Core skills in research design and project formulation.	Practical classes, tutorials and fieldcourse	Research proposal. Research Design practical exercises.
Advanced study skills and engagement with research-level literature.	Fortnightly tutorials, work within lecture modules	Tutorial exercises (eg abstracts), lecture-module assignments.

THIRD YEAR. In third year students gain skills and knowledge specific to Physical Geography, but also a range of skills and knowledge applicable to a wide range of employment opportunities that will also establish the basis for a future of lifelong learning.

Third Year Material	Modules	Assessments
Specialist knowledge and understanding of Physical Geography topics and concepts at the cutting edge of the discipline	Option-based lecture modules.	A flexible mix of essays, posters, projects, etc, depending on options taken; short-answer tests; unseen exams.
Advanced research skills and practical techniques in Physical Geography, including fieldwork.	The Dissertation	Dissertation

What will students learn throughout the programme?

Knowledge and Understanding of Physical Geography topics

Successful students will be able to demonstrate knowledge and understanding of:

- the contribution of *research* to the development of knowledge in Physical Geography
- the dynamic, plural and contested *nature of the discipline*
- patterns of *spatial variation* as dynamic characteristics of the physical environment
- characteristics, diversity and interdependence of *places* outside their own everyday experience
- the way that physical environments *change through time*
- the significance of spatial and temporal *scale* in physical processes
- the use of *systems* at a range of scales to conceptualise patterns, processes, interactions and change in the physical world
- different *methodological strategies* used in the observation, analysis, interpretation and representation of geographical information
- *applications* and *limitations* of Physical Geography in problem solving, wealth creation and improving quality of life.

Teaching and learning employed to achieve these outcomes include: Formal classes (lectures, practicals, fieldcourses, seminars, workshops and tutorials); Directed reading and web-supported study; Independent study and reflection. The acquisition of knowledge and understanding underpins most of the programme, but is most explicitly addressed in lecture modules. The Dissertation ultimately allows students to combine knowledge, understanding and skills in a research project.

Assessment of students' knowledge and understanding is achieved by: Formative assessment in individual or small group tutorials; Coursework essays, posters, technical reports and web-pages; In-class and online exercises and tests; Individual or group oral presentations; End of course examinations.

Skills specific to Physical Geography

Successful students will be able to:

- plan, design and execute a piece of research in Physical Geography, including production of a final report
- undertake effective Physical Geography fieldwork with due regard for safety and risk assessment
- work safely in a Physical Geography laboratory, with awareness of standard procedures
- prepare effective maps and diagrams using a range of appropriate technologies
- employ a variety of technical field and laboratory-based methods for the collection and analysis of spatial and environmental information including surveying and the use of GIS
- combine and interpret different types of geographical evidence

Subject specific skills are taught most explicitly in the practical and field course programmes and in the dissertation module. Teaching and learning strategies and methods employed to achieve these outcomes include: Practical classes, field courses and independent project work; Individual dissertation tutorials; Directed reading and independent study.

Assessment of students' subject-specific skills is achieved by: a 6,000 or 11,000 word independent research project (dissertation); a formal research proposal and risk assessment; in-class exercises and tests; coursework essays, posters, technical reports and web-pages; fieldcourse or practical class reports.

Intellectual Skills

Successful students will be able to:

- assess the merits of contrasting theories, explanations and policies
- analyse and solve problems
- make reasoned decisions
- evaluate evidence and make critical judgements
- make critical interpretations of data and text
- abstract and synthesise information
- develop a reasoned argument
- take responsibility for their own learning and develop a habit of reflection upon that learning

Intellectual skills are developed throughout the course, and handled most explicitly in tutorial, workshop and practical classes, as well as in the dissertation and in individual progress interviews. Teaching and learning strategies and methods employed to achieve these outcomes include: Formal classes (lectures, practicals, fieldcourses, seminars, workshops and tutorials); Individual dissertation tutorials and Individual progress interviews; Independent project work; Directed reading and web-supported study; Independent study and reflection.

Assessment of students' intellectual skills is achieved by: Tutorial assignments and group discussion; A 6,000 or 11,000 word independent research project; Coursework presentations; End of course examinations; Practical class exercises; Formative assessment and feedback in individual progress interviews.

Employability Skills

Employability Skills are embedded within the modules in all three years in order to equip students with core skills and knowledge that are transferable into post-University experience (Goal 7, University and School Learning and Teaching Strategies). In addition, where relevant, modules seek to highlight relevant employment opportunities for geography graduates. Generic employability skills included within the programme include:

- *Written communication skills:* The development of written communication skills is a key element of the programme. Students complete various written assignments in all three years including essays, poster presentations, technical reports and a large dissertation. Specific training is provided in the year 1 tutorial programme, addressing academic writing skills such as referencing.
- *Oral presentation skills:* Students gain experience in oral presentation skills within many modules including the year 1 tutorial programme.
- *Communication skills:* Students are encouraged to discuss and debate ideas in small-group tutorial sessions in year 1, and are encouraged to discuss specific aspects of their work with their peers and their module tutors. This is facilitated by the open-door policy operated by the geography staff.
- *Problem solving:* The ability to resolve problems with complex solutions is an important part of the programme and is included within a number of module assessments and fieldwork activities.
- *Fieldwork skills:* Students are introduced to a range of field skills such as surveying during the course of the degree programme. They are also trained in risk assessment techniques that are central to safe working in the field.
- *Numeracy skills:* Numerous practical exercises include the analysis and manipulation of numerical datasets. The first year practical programme in particular involves the geographical application of a variety of statistical techniques.
- *Working independently:* Successful completion of the degree programme requires students to work independently. This ranges from the wider reading required to expand on material covered within the lectures, to the final completion of a major independent research project in year 3.
- *Literature searching:* In years 2 and 3 in particular, students are required make use of journal literature. Effective engagement with these advanced sources requires the development of sophisticated search skills that are introduced in the year 1 tutorials and further developed in the year 2 programme.
- *Team working:* Team work is an integral part of the field courses in years 1 and 2 and students therefore have numerous opportunities to work as part of a team. Some modules include assessments that require students to work as a group (e.g. ESC-20029: Practical Physical Geography).
- *IT skills:* Key IT skills are taught to all undergraduates at the beginning of Year 1. Instruction is given in core software applications (e.g. spreadsheet software) so that all students have the same level of core knowledge of essential computing techniques. Particular emphasis is placed on the use of industry-standard GIS software (ArcGIS) to analyse, visualise and integrate spatial datasets.

- *Learning to Learn*: The first-year tutorial programme recognises the challenge posed by the transition from Secondary to Higher Education (Goal 2, University and School Learning and Teaching Strategies) and consequently focuses on introducing students to the key study skills required to work effectively in a university environment (e.g. time management, note taking, use of feedback and reflection, how to find relevant literature, referencing and plagiarism etc.). This is facilitated by the small-group learning and close support from a nominated member of staff from their arrival at Keele.

What are the typical admission requirements for the programme?

Admission requirements for Physical Geography are typically 300 UCAS points (with two A-levels at grades BC). Applicants must normally have A/AS-level in Geography or in Biology, Chemistry, Environmental Science, Geology or Physics, and GCSE Maths grade C or above. In line with University policy alternative qualifications may also be considered, and applicants should refer to the prospectus for details.

Completion and Awards

Students may complete the Physical Geography Principal Programme with one of three final awards:

1. BSc Dual Honours Degree: Students must obtain a total of 360 credits, with a total 120 of credits at each level and including at least 30 credits in each of their Dual Honours subjects at each level and at least 120 credits in total in each subject. Students following the Dual Honours Physical Geography programme outlined in this specification will typically take 60 credits in Physical Geography in each of the three years (see tables on pages 5-7).
2. BSc Major Honours Degree: Students must obtain a total of 360 credits, with a total 120 credits at each level and including at least 30 credits from their Major subject at each level, with at least 225 credits in total in the Major subject. Students following the Major Honours Physical Geography programme outlined in this specification will typically take 60 credits in Physical Geography at each of levels 1 and 2, and at least 105 credits from Physical Geography at level 3.
3. BSc Minor Honours Degree: Students must take at least 90 credits in their Minor subject, with at least 30 credits taken at Level I and at least 45 credits at Level II. Students following the Minor Honours Physical Geography programme outlined in this specification will typically take 60 credits in Physical Geography at each of levels 2 and 3, and need not take any Physical Geography at level 3.

Additional exit points for students not completing the required credits for these honours degrees are as stipulated by University regulations.

How are students supported on the programme?

Subject Tutors

Each student in Physical Geography is supported by an individual Physical Geography tutor with whom the student will meet on a weekly basis throughout the first year and fortnightly in 2nd year. Students have free access to these tutors at all times throughout their studies. They are also supported by the Physical Geography Course Director who is always available to help.

Personal Tutors: All students are allocated a Personal Tutor for the duration of their studies as part of the University's Personal Tutor system.

Use of e-learning/the Keele Learning Environment (KLE): All modules are supported by learning materials that are accessible to students via the KLE.

Health and Safety: All students admitted to the course are required to sign an acknowledgement that they have read the Earth Sciences and Geography Safety Handbook and that they will abide by the rules and regulations governing efficient working, safety and welfare both within the University and in the field. They are also required to declare any medical conditions that may influence their ability to work in the field so that these can be discussed and suitable adjustments made if necessary.

Students with disabilities: Students with disabilities or medical problems will meet with a member of the University's Disability Services department and the Earth Sciences and Geography Disability Officer at the start of the course in order to discuss any special requirements. Procedures will then be implemented according to the nature of the student's disability or medical problem. These procedures can range, for example, from allowing extra examination time for students diagnosed as dyslexic, to allocating additional staff or demonstrators to field classes to help students with mobility problems.

Further information: It is essential that students consult the course web site at regular intervals for definitive versions of the Physical Geography handbooks, on-line course materials, and programme and module specifications. This can be accessed at: <http://www.keele.ac.uk/eesg/physicalgeography/> . On-line learning and teaching materials related to individual modules are available on the Keele Learning Environment, which can be accessed from: <http://www.students.keele.ac.uk/> . It is also essential that all students read the Earth Sciences and Geography Handbook for general information. This handbook can be accessed at: <http://www.keele.ac.uk/eesg/handbooks/>

Learning Resources

Physical Geography is based with the other Geography and Geoscience subjects in the William Smith Building, which contains well-equipped laboratories and lecture theatres. This concentration of facilities and staff into one building enables students to identify with a specific base within the University. The School Office is open continuously during the week from 9 am to 5 pm to answer student queries and deal with administrative tasks. Staff operate an open-door policy so that students can obtain easily obtain support and advice. All modules are supported by Keele's online Virtual Learning Environment. The William Smith Building is conveniently located close to the library and other campus facilities.

Other learning opportunities

Year 2 students are encouraged to take advantage of the University's Study Abroad programme, details of which are provided in the prospectus.

Fieldwork is an important part of geographer's training, providing the opportunity to acquire and practice field-based skills, to develop skills of observation and recording and to work as effective members of a team.

Quality management and enhancement

We operate a range of procedures, consistent with the University's Quality and Standards practices, to assist the effective management and continuous enhancement of the quality of its teaching. Specific procedures that are applied to the Physical Geography programme include: Student evaluation of teaching; Peer observation of teaching; Geography Staff Student Liaison Committee; Geography Course Management Committee; Annual Review of Courses as part of University's *Curriculum Annual Review and Development* (CARD) process; Annual production and review of module reports; Mentoring and monitoring of new staff. The School Learning and Teaching Committee (LTC), in conjunction with the School's Quality Assurance Officer and School Manager, are responsible for monitoring and assuring the operation of quality assurance procedures. In addition, feedback provided by External Examiners is used to ensure that academic standards are maintained in comparison to similar programmes offered at other universities. Students are represented in the management of the programme through the module evaluation process and through participation in the Geography Staff-Student Liaison Committee, which meets at least once per semester. In addition, student input is invited, where appropriate, to inform discussions and decisions made by the Geography Course Management Committee and School LTC.

Physical Geography Course Regulations

Course regulations for the Physical Geography degree programme can be found at: <http://www.keele.ac.uk/eesg/students/geography/>

Important regulations include the following:

Students are required to attend practical classes, tutorials, seminars, fieldcourses and lectures. Attendance at all these sessions is monitored and checked by the academic support staff and course directors. Students who display a poor attendance record for no good reason may be subject to disciplinary action.

Students are required to follow the guidelines provided in the Safety and Fieldcourse Handbooks. Instructions contained in course, year and module handbooks constitute part of the regulations.

The principles of programme design

The content and learning outcomes of the Geography degree programme have been developed with reference to:

- Quality Assurance Agency Framework for Higher Education Qualifications in England, Wales and Northern Ireland
<http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp>
- Quality Assurance Agency Subject Benchmark Statement for Geography (2007)
<http://www.qaa.ac.uk/academicinfrastructure/benchmark/statements/Geography.pdf>
- Keele University Learning & Teaching Strategy
<http://www.keele.ac.uk/depts/aa/landt/docs/LTStrategy.pdf>
- Keele University Academic Quality and Standards Manual
http://www.keele.ac.uk/depts/aa/qao/AQSM2008/AQSM2008_index.htm
- Keele University Regulations and Guidance for Students and Staff
<http://www.keele.ac.uk/regulations/>

Date of this revision of the programme specification: June 2011.

The information in this Programme Specification is as accurate and up-to-date as we can make it. However, it may be necessary from time to time to vary courses, procedures and other arrangements (e.g. fieldwork) in the light of new opportunities and in response to influences from within and external to the University. The definitive version of this Programme Specification can be viewed on the School web site.

This update:

Dr Peter G Knight,
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June 29th 2011.