

## **BSc Physical Geography**

**UCAS code: F840**

Awarding Institution:	The University of Reading
Teaching Institution:	The University of Reading
Relevant QAA subject benchmarking group(s):	Geography,
Faculty of Science	Programme length: 3 years
For students entering Part 1 in 2002	Date of specification: March 2003
Programme Director: Mr D Foot	
Programme Adviser:	
Board of Studies: Geography	
Accreditation:	

### **Summary of programme aims**

The programme aims to provide undergraduate students with both subject-specific knowledge and general skills. It aims:

- to give students a thorough insight into the importance of a geographic perspective on physical processes, including the manner in which these processes operate at global, regional and local scales
- to impart knowledge of the theory and practice of physical geography, together with an ability to integrate different perspectives
- to encourage students to make appropriate use of theories and research findings from the physical sciences in understanding spatial phenomena
- to develop students' skills in applying theoretical concepts, knowledge and philosophies to the understanding of particular environments, spatial differences and to decision-making
- to develop understanding through fieldwork and other forms of experiential learning
- to develop skills in how to interpret, analyse and tackle geographical issues
- to develop interdisciplinary aspects of knowledge
- to promote students' ability to engage in lifelong learning

### **Transferable skills**

The University's Strategy for Teaching and Learning has identified a number of generic transferable skills which all students are expected to have developed by the end of their degree programme. In following this programme, students will have had the opportunity to enhance their skills relating to career management, communication (both written and oral), information handling, numeracy, problem-solving, team working and use of information technology.

By the end of the programme students also should have acquired: critical and analytical skills; a basic competence in empirical research; an ability to place issues in a wider context, to make connections between apparently disparate events and issues, and to handle alternative ways of understanding particular situations; an ability to relate theoretical knowledge and ideas to practical situations; writing, reasoning, verbal and presentation skills, and specific technical skills, such as computing, word-processing and statistics.

### **Programme content**

The profile which follows states which modules are compulsory, together with lists of optional modules from which the student must make a selection in consultation with their programme adviser. Students must take a combination of compulsory and optional modules making a total of 120 credits in each Part of the programme. The number of credits for each module is shown after its title. Part 1 Physical Geography is two 20 credit modules and other optional modules can be drawn from anywhere in the University subject to any restrictions which may be applied to particular modules. In Part 2 all modules are compulsory and are 10 or 20 credit modules. Part 3 students write a dissertation (40 credits) and select from a list of Geography option modules that are approved each year and worth 20 credits each.

<b>Part 1 (three terms)</b>		<i>Credits</i>	<i>Level</i>
<i>Compulsory modules</i>			
GG1P1	<i>Physical Geography 1: Climatology and Hydrology</i>	20	1
GG1P2	<i>Physical Geography 2: Geomorphology and Biogeography</i>	20	1
GG1IT	<i>Analytical and Communication Skills</i>	20	1

*Optional modules:*

60 credits chosen from

GG1H1	<i>Human Geography 1: Society and Space</i>	20	1
GG1H2	<i>Human Geography 2: Cores and Peripheries</i>	20	1

and modules in other departments

<b>Part 2 (three terms)</b>		<i>Credits</i>	<i>Level</i>
<i>Compulsory modules</i>			
GG2P1	<i>Geomorphological Hazards</i>	10	2
GG2P2	<i>Applied Biogeography</i>	10	2
GG2P3	<i>Environmental Change</i>	10	2
GG2P4	<i>Soil and Environment</i>	10	2
GG2P5	<i>Hydrological Processes</i>	10	2
GG2P6	<i>Remote Sensing and Image Processing</i>	10	2
GG2R	<i>Environmental Resources</i>	10	2
GG2M	<i>GIS and Mapping</i>	10	2
GG2T	<i>Geographical Techniques</i>	20	2
GG2FP	<i>Physical Geography Fieldclass</i>	20	2

<b>Part 3 (three terms)</b>		<i>Credits</i>	<i>Level</i>
<i>Compulsory modules</i>			
GG3D	Dissertation	40	3

*Optional modules:*

4 modules (80 credits) chosen from a list of option modules approved each year.

Those currently approved are:

GG321	<i>Environmental Management</i>	20	3
GG331	<i>Dryland Environments</i>	20	3
GG332	<i>Landscape Ecology</i>	20	3
GG336	<i>Crete Fieldclass</i>	20	3
GG327	<i>Water Pollution Issues</i>	20	3
GG326	<i>Maps: Design and Function Quality</i>	20	3
GG333	<i>Water Quality Modelling</i>	20	3
GG334	<i>Glacial and Periglacial Geomorphology</i>	20	3
GG335	<i>Ice Sheets and Climate Change</i>	20	3

### **Progression requirements**

In order to progress from Part 1 to Part 2, a student shall normally be required to:

- achieve an overall average of 40% in 120 credits taken in Part 1; and
- achieve an average mark of 40% in the 40 credits of modules GG1P1 and GG1P2; and
- achieve not less than 30% in any module taken in Part 1, except that marks of less than 30% in a total of 20 credits may be condoned, provided that the candidate has pursued the course for the module with reasonable diligence and has not been absent from the examination without reasonable cause.

In order to progress from Part 2 to Part 3, a student shall normally be required to:

- achieve an overall average of 40% in the 120 credits taken in Part 2; and
- achieve an overall average of 40% in the 60 credits of modules GG2P1, GG2P2, GG2P3, GG2P4, GG2P5, GG2P6; and
- achieve an overall average of 40% in the 60 credits of modules GG2R, GG2M, GG2T, GG2FP; and
- achieve not less than 30% in any module taken in Part 2, except that marks of less than 30% in a total of 20 credits may be condoned, provided that the candidate has pursued the course for the module with reasonable diligence and has not been absent from the examination without reasonable cause.

Final Degree Assessment: 33% Part 2 and 67% Part 3.

### **Summary of teaching and assessment**

Teaching is organised in modules which typically involve both lectures and either seminars or practicals. These modules are assessed by a mixture of coursework and formal examination. However, certain modules are totally continuously assessed. These are the techniques modules GG1IT, GG2M and GG2T, the fieldclass module GG2FP and the dissertation GG3D.

### **Admission requirements**

Entrants to this programme are normally required to have obtained:

Grade C or better in English Language and Mathematics in GCSE/O Level

UCAS Tariff: 300 points, 100 points in Geography.

Total points must include at least 2A2 passes.

Total points exclude Key Skills and General Studies.

International Baccalaureate: 28 points including 6 in Geography

Irish Highers: BBBB

We welcome deferred-entry applications from those wanting to take a gap year between school and university, and from mature students and students with special needs, for whom we may take a broader view of entry requirements. For those with special needs we are happy, when necessary, to take a flexible approach to field-work and practical work requirements, and to make appropriate arrangements for note taking and examinations.

Admissions Tutor: Dr K. White

### **Support for students and their learning**

University support for students and their learning falls into two categories. Learning support includes IT Services, which has several hundred computers and the University Library, which across its three sites holds over a million volumes, subscribes to around 4,000 current periodicals, has a range of electronic sources of information and houses the Student Access to Independent Learning (S@IL) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language Programme. Student guidance and welfare support is provided by Personal Tutors, the Careers Advisory Service, the University's Special Needs Advisor, Study Advisors, Hall Wardens and the Students' Union.

### **Career prospects**

A Reading geography degree is designed to assist graduate employment in three ways:

Firstly, it provides a basis for employment in fields directly or indirectly related to the content of the degree course, though this often involves a post-graduate qualification. Examples are jobs in teaching (in universities, colleges, schools and field centres), regional and economic planning, computing, transport management, conservation, land evaluation, civil engineering.

Secondly, a Reading geography degree enhances employment prospects because of the rigorous academic training regardless of the subject matter. Again, most other jobs usually involve further (in-service) training. Examples of such careers include insurance, banking, accountancy, civil service, armed forces and commercial management.

Thirdly, employers are attracted by the impressive quantitative/numeracy skills acquired in the degree programme, together with their experiences in computer usage, field projects (at home and abroad) and the planning/execution of the major dissertation research programme. Employers are seeking the flexible, skilled and adaptable geography graduates produced at Reading.

### **Opportunities for study abroad or for placements**

As part of the Part 3 course, students can spend one term, either term 7 or term 8, studying at a European University under the ERASMUS exchange scheme. Study undertaken abroad substitutes for study in Reading.

There are Physical Geography links for ERASMUS exchanges with the university of Aarhus (Denmark).

The Erasmus programmes are co-ordinated by Dr C. Stokes.

### **Educational aims of the programme**

The programme aims to produce graduates with both subject-specific skills and knowledge in Geography and a range of cognitive, generic and transferable skills.

## Programme Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

### *Knowledge and Understanding*

<p><b>A. Knowledge and understanding of:</b></p> <ol style="list-style-type: none"><li>1. Processes, concepts and techniques in physical geography</li><li>2. The nature of change and the significance of spatial relationships within human and physical environments</li><li>3. Fundamental concepts of physical geography, such as processes operating in the atmosphere, hydrosphere, lithosphere, pedosphere and biosphere</li><li>4. Geographic perspectives on physical processes and their interaction at global, regional and local scales.</li><li>5. The main methodological strategies used in the analysis of geographical information.</li><li>6. The application of geographical concepts, techniques and expertise to problem solving.</li></ol>	<p><b>Teaching/learning methods and strategies</b></p> <p>Most of the knowledge required for the basic topics is discussed in formal lectures supported by smaller group discussions and practicals</p> <p>At Part 2 knowledge is also gained through a 1-week fieldclass and practical work.</p> <p>In Part 3 the specialised option modules include writing detailed assessments of set topics, making oral presentations and joining in group discussion</p> <p><i>Assessment</i></p> <p>Most knowledge is tested through a combination of coursework and unseen formal examinations. Oral presentations also contribute.</p>
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## *Skills and other attributes*

<p><b>B. Intellectual skills</b> – able to:</p> <ol style="list-style-type: none"><li>1. think logically</li><li>2. develop a reasoned argument</li><li>3. organise tasks into a structured form</li><li>4. abstract and synthesise information</li><li>5. critically judge and evaluate evidence</li><li>6. assess the merits of contrasting theories, explanations and policies</li><li>7. transfer appropriate techniques and knowledge from one subject area to another</li><li>8. organise and reflect upon their own learning</li><li>9. recognise the moral and ethical issues involved in academic and policy debates</li></ol>	<p><b>Teaching/learning methods and strategies</b></p> <p>The need to think logically and analytically permeates the compulsory modules in the course. Skills 2-7 are developed in essay writing, and continuously assessed project work and the dissertation. 8 is developed throughout the entire programme. 9 is developed both in discussion groups, readings and written work.</p> <p>The more specialist topics provide many opportunities to apply and develop these skills through the analysis of a range of problems in a wide variety of contexts.</p> <p><i>Assessment</i></p> <p>1-6 are covered extensively in the core modules; 7-9 are given wide scope in the optional modules.</p>
<p><b>C. Practical skills</b> – able to:</p> <ol style="list-style-type: none"><li>1. present a chain of reasoning</li><li>2. apply theoretical concepts and knowledge to the understanding of particular environments and spatial differences and to decision-making</li><li>3. analyse geographic problems using a variety of techniques and principles</li><li>4. evaluate policies from a geographic standpoint</li><li>5. communicate both orally and in writing critical analysis of geographic and environmental issues</li><li>6. plan, organise and write a report on an independent project</li><li>7. plan and undertake field surveys</li><li>8. analyse data gathered from the field and be aware of its limitations</li></ol>	<p><b>Teaching/learning methods and strategies</b></p> <p>Modules concentrate on formal geographic reasoning. Problem solving forms an important part of class work especially in Parts 2 and 3.</p> <p>In geography the ability to use all these skills is developed through essay writing, practicals, field work and small group discussions.</p> <p>The assessed work in the specialised options involves writing detailed assessments of set topics.</p> <p><i>Assessment</i></p> <p>All skills are tested through a combination of coursework, including both problem solving and essays, and through unseen examinations. 6 is assessed directly by means of the large number of essays prepared in Parts 1, 2 and 3. It is also assessed in Part 2 projects and the Dissertation.</p>

**D. Transferable skills – able to:**

1. use IT (word-processing, spreadsheets databases, email and www))
2. apply skills of numeracy, graphicity and computation to data analysis
3. communicate ideas in a logical way in both writing and speech
4. give oral presentations
5. contribute to group discussions of a geographic problem
6. use library resources both on- and off-line
7. manage time
8. plan career strategy

**Teaching/learning methods and strategies**

The use of IT is initiated in the Part 1 IT and Statistic module and further developed in the Part 2 Geographical Techniques module. Word processing is required throughout the degree programme

Seminars in Parts 2 and 3 involve group discussions and oral presentations. Part 2 work includes preparation of group projects

Library and internet resources have to be used continuously in the preparation of essays and project work

The highly structured system of deadlines for assessed work requires good time management

Career planning is taught through a Part 2 Career Management Skills course with lectures and self paced computer-based assignments. Also, one-to-one meetings with career staff can be arranged

*Assessment*

IT skills are assessed directly at Part I. Most skills are tested indirectly through the preparation of course and project work.

*Please note:* This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably expect to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in module and programme handbooks.