



1. Programmes:

Programme Title	UCAS GU Code Code
BSc (Hons) in Environmental Stewardship	D447 C49F906

2.1 SCQF Level:

10

2.2 Credits:

480

3. Awarding Institution:

University of Glasgow

4. Teaching Institutions:

University of Glasgow

5. College:

College of Social Sciences

6. School:

Interdisciplinary Studies [REG40300000]

7. Programme Accredited By:

N/A

8. Entrance Requirements:

¹ This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if full advantage is taken of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each course can be found in course handbooks and other programme documentation and online at www.gla.ac.uk

The accuracy of the information in this document is reviewed periodically by the University and may be checked by the Quality Assurance Agency for Higher Education.

Please refer to the current undergraduate prospectus at: <http://www.gla.ac.uk/undergraduate/prospectus/> and the Dumfries Campus undergraduate prospectus at: http://www.gla.ac.uk/media/media_64392_en.pdf.

9. Programme Aims:

Environmental issues affect us all, from global concerns such as energy demand, biodiversity loss, and climate change, to more local matters such as flooding, and the quality of rural and urban environments. This degree aims to unravel the complexity in defining the broad concepts of environmental stewardship and sustainable development, whilst examining the practical implications of their adoption. Implicit in this programme is a need to understand the processes operating in the natural environment, the interaction of society with natural systems and the resulting environmental problems. Through the use of case studies, field visits and independent project work, students will explore the issues and debate some of the approaches used to address environmental problems in the pursuit of stewardship of the environment. The degree offers students the opportunity to engage with a variety of environmental management techniques, making students well equipped to support a burgeoning market for graduates conversant with the skills, knowledge and experience in implementing sustainability objectives.

This degree programme aims to:

- o explore the concepts of environmental stewardship and sustainable development and examine the adoption of these concepts at local, community, governmental and international levels;
- o develop understanding of the physical, biogeochemical, and ecological systems operating in the natural environment and investigate their interactions with humans, in particular those actions leading to environmental problems arising at different spatial and temporal scales;
- o give students evaluative tools with which to debate the contrasting approaches taken to achieve sustainability within a range of land-use and resource-use scenarios, whilst also examining the often conflicting stances taken by individuals, organisations and governments;
- o acquaint students with a range of political, legislative and economic instruments used to manage development of the natural environment and provide students with the opportunity to engage with a range of environmental management techniques, including gaining practice through student-led projects;
- o provide a supportive learning environment within which students can develop their confidence, practise written and oral skills, increase their capacity for independent thought, and enhance their own professionalism in working, negotiating and cooperating with others.

10. Intended Learning Outcomes of Programme:

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

On completion of this programme students will be able to:

- o apply knowledge of the complexities in defining, planning for, and achieving environmental stewardship and sustainable development;
- o display a broad and critical understanding of the variety of political, legislative, economic and environmental management instruments used at local, national and international levels to achieve environmental stewardship;
- o demonstrate a sound understanding of natural earth systems and human interactions with these systems;
- o identify and evaluate the scientific, social and economic bases of local and global environmental problems, the approaches taken to combat them, and in particular the role of individuals in addressing and redressing environmental degradation.

Skills and other attributes

Subject-specific/practical skills

On completion of this programme, students will be able to:

- o utilise research techniques from the sciences and social sciences, engage in the research design process, conduct research individually and as part of a team, present results in appropriate formats, and evaluate and discuss findings within a problem-solving context;
- o apply stewardship principles to a variety of practical case studies;
- o investigate human-environment interactions through field and lab-based studies and conduct fieldwork whilst appreciating the potential impact on the environment, the ethical implications of undertaking social research in the field, health and safety issues and rights of privacy and access.

Intellectual skills

On completion of this programme, students will be able to:

- o evaluate and critique the practical implications of adopting environmental stewardship as a model for economic and societal growth and development;
- o adopt an interdisciplinary approach to the discussion of environmental problem-solving;
- o compare the roles of different levels of society (individuals, local/national government, NGOs/interest groups and intergovernmental panels) in the pursuit of sustainable development and analyse the extent to which personal attitudes, culture and national priorities impact on the instruments used to effect change.

Transferable/key skills

On completion of this programme, students will be able to:

- o demonstrate personal and professional skills through team working, presenting reports, project management and design;
- o demonstrate proficiency in data acquisition, analysis, presentation and discussion;
- o compile, synthesise and critique information from a variety of sources, including the judicious and critical use of internet sources;
- o use theory in practical problem-solving;
- o work independently, manage personal time and organise and prioritise work schedules;
- o demonstrate aptitude in presenting information orally and in written forms, ensuring that the nature of the presentation is appropriate to the audience;
- o demonstrate the ability to use ICT in effective communications.

11. Assessment Methods:

A range of assessment methods is used to test their achievement of the intended learning outcomes.

- o The depth of understanding of primary material is assessed formatively and summatively, largely through essays, project work, and examinations. Emphasis is given to the importance of critical analysis of material, concepts and theories. Students are therefore assessed on their ability to present convincing and well-supported arguments in their written assignments. There is an expectation in all written work that students demonstrate that they have undertaken independent reading and have used their initiative in sourcing materials.
- o The use of small-scale projects is considered to be an important tool in testing that students can apply their knowledge to a given problem. These projects demand that students take responsibility for their own learning thereby promoting a deeper understanding of the subject.
- o Project-based assessment is also key to ensuring that students demonstrate the ability to access environmental data, either from existing sources or by self-collection. Many of the projects require students to undertake their own research, with different projects requiring the use of different research methods. Students therefore are assessed on their ability to apply the appropriate method to any given research scenario. Students must also be aware of the limitations of different research methods and to be able critically to evaluate results within wider problem-solving contexts.
- o Students are required to undertake oral presentations throughout their studies which requires that they not only know the material they are presenting, but understand it to such an extent that they can convey often complex issues to others. Oral presentations give students the opportunity to practise their skills and develop confidence, but also tutor them in the art of presenting material to a wide and varied audience.
- o A number of projects are undertaken by students working in groups and these are used to develop their personal and interpersonal skills. These are assessed summatively in terms of the effective delivery of the project aims and formatively through self-evaluation of the group work process.



12. Learning and Teaching Approaches:

A variety of teaching methods are used to deliver the programme aims to ensure that students are given a range of learning environments; this recognises the fact that students learn in different ways.

- Primary material is delivered through lectures, tutorials, and seminars in which students are presented with contemporary theories and contrasting analyses within the sustainability debate. Concepts are discussed in relation to case studies in order to facilitate an objective analysis of the practicalities of sustainability objectives. Extensive use is made of current environment-based policy documents and reports, thereby ensuring that students are apprised of current thinking and application.
- A key method employed is field-based teaching and learning. Courses at all levels have some element of field experience with exercises ranging from simple observation to data collection. Through these, students acquire and apply research skills to solve particular problems or address particular scenarios.
- Students must, at all stages in their studies, be conversant with associated literature emanating from governmental/agency sources and in academic journals/texts. Extensive reading lists are provided for each course. Students are also given specific library instruction in search skills thereby ensuring students make effective use of on-line resources. Independent reading is considered an integral part of the learning process and is the most effective way by which students can access a broad range of views, perspectives and debates.
- Group work is used as a mechanism not only to encourage the development of personal organisational skills, but also to allow students to demonstrate their initiative in dealing with problem-solving, to increase their professionalism in dealing with others, and to improve the effectiveness of their communication skills. Group working also provides practical experience of the inherent difficulties in delivering sustainability objectives caused by personal/national agendas and priorities.
- A large number of external speakers contribute to the seminar sessions at all levels, thus exposing students to the practicalities of implementing theories within a context of economic, political and practical constraint.
- The majority of courses on the programme utilise the virtual learning environment Moodle for e-learning.

13. Relevant QAA Subject Benchmark Statements and Other External or Internal Reference Points:

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/earthscience.pdf>

This benchmark covers the areas of Earth Sciences, Environmental Sciences and Environmental Studies. This programme sits firmly within the subject knowledge area of Environmental Studies.

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/agriculture09.pdf>

This benchmark covers the areas of Agriculture, Horticulture, Forestry, Food and Consumer Sciences. This programme covers some aspects of the Agriculture and Forestry subject knowledge areas.

14. Programme Structure and Features:

The programme contains compulsory and elective elements. A typical programme structure is outlined below.

Level 1 (totalling 120 credits) <i>On successful completion, possible exit with a Certificate of Higher Education</i>			
1 st Academic Session	Introduction to Global Environmental Issues	20 credits	Semester 1
	Text and Communication	20 credits	Semester 1

Level 2 (totalling 120 credits) On successful completion, possible exit with a Diploma of Higher Education			
2 nd Academic Session	Research Methods for Environmental Scientists	20 credits	Semester 1
	Sustainability of Farming Systems	20 credits	Semester 2
	Energy: options for sustainability	20 credits	Semester 2
	<i>plus</i> ANY three courses with a maximum of 2 at Level 1 (certain courses are recommended by the programme director).	60 credits	
Level 3 (totalling 120 credits) On successful completion, possible exit with a BSc Environmental Stewardship			
3 rd Academic Session	Human Impact on the Environment	20 credits	Semester 1
	Applied Ecology and Conservation	20 credits	Semester 1
	<i>plus, either</i> Rural Tourism and Stewardship, or	20 credits	Semester 1
	Current Issues in Science, Technology and Medicine	20 credits	Semester 1
	<i>plus, either</i> Dissertation*, or	60 credits	Semester 2
	Placement	60 credits	Semester 2
Level 4 (totalling 120 credits) On successful completion, possible exit with a BSc (Hons) Environmental Stewardship			
4 th Academic Session	Environmental Stewardship Project	60 credits	Semester 1 and 2
	<i>Either, Environmental Economics, or</i>	15 credits/	Semester 1/
	Natural Resource Economics	15 credits	Semester 2
	<i>plus</i> three further core courses to be approved	45 credits	

As long as the minimum requirements are fulfilled, the number, level and order in which courses are taken may vary, especially for part-time students. Progression, subject to the fulfilment of any prerequisites, is on the basis of credit accumulation.

***Dissertation:** The Level 3 Dissertation provides students with the opportunity to undertake an extended in-depth research project in a subject area of their choice using appropriate methods. It also gives the opportunity to consolidate bibliographical and critical analytic skills and a further opportunity to improve communication skills.

See: www.gla.ac.uk/departments/dumfriescampus/undergraduatestudy/a-zundergraduatecourses/dissertation-level3/#d.en.69048 for full information on the requirements and assessments for the dissertation. Students will be supervised throughout by the dissertation convener and two environmental staff.

15. Additional Relevant Information:

Environmental issues affect all of us, from global concerns, such as energy demand, biodiversity loss and climate change, to more local matters such as flooding or the quality of rural and urban environments. Environmental sustainability is relevant and contemporary, and with growing environmental awareness (within the general public and through formal school education) it is likely that there will be greater demand for courses such as Environmental Stewardship. The new Curriculum for Excellence in Scottish schools lists 'Energy Sources and Sustainability' and 'Biodiversity and Interdependence' as two of the core themes in its Planet Earth topic; its 'Topical Science' theme is very much related to all things environmental. This specific requirement of school children to study the environment will generate a new interest in environmental related degrees. As a result, there is no better time to be offering a degree in Environmental Stewardship given current high media attention and the infiltration of environmental issues into the fabric of everyday life.

The Subject Benchmark Statement for Earth Sciences, Environmental Sciences and Environmental Studies (2007)² has updated its requirements to ensure that 'greater emphasis (is placed) on sustainability with particular emphasis on the environmental context of sustainability; greater emphasis (is placed) on employability; greater emphasis (is placed) on the links to, and roles of, professional bodies; greater emphasis (is placed) on interdisciplinarity and problem solving in subject skills.' The BSc (Hons) Environmental Stewardship programme would satisfy these requirements through its focus on environmental sustainability, its work placement, and the contribution of many external organisations to the degree.

Education for Sustainable Development

The undergraduate environmental courses currently on offer at the Dumfries Campus introduce students to the concept of environmental sustainability and sustainable development. In this way, and with the introduction of the BSc (Hons) in Environmental Stewardship, the University of Glasgow will be working towards the Climate Change (Scotland) Act 2009³, Universities and Colleges Climate Commitment for Scotland⁴, and Strategic Theme 4 (Sustainable Development) of the Scottish Funding Council's Corporate Plan for 2009/2012. Courses on the new programme will have sustainable development embedded within them.

Why Glasgow University, Dumfries Campus?

Glasgow University in Dumfries is uniquely located for the study of environmental stewardship with easy access to estuarine, maritime and terrestrial environments such as the southern uplands, merse, peat bog and moorland. These features together with the extensive agricultural and forested environment of the region present a vibrant and diverse 'laboratory' in which to study. It is likely to be most attractive to students who wish to study outwith a city location, and having these appealing features on the doorstep cannot be claimed by most other institutions offering an environmental undergraduate degree! Also of importance is Glasgow University's reputation for scholarship over the last 550 years; Glasgow University would be the only University in the UK offering this degree title.

Collaboration with Environmental Organisations

The current environmental courses on offer at the campus (which will contribute to the Environmental Stewardship degree) have many contributors from local and national organisations, who for the most part give their time free to the degree. Some of these organisations offer employment (paid and unpaid) to our students. Collaborators include:

1. **Scottish Environmental Protection Agency:** field class to river gauging stations, work placement, supervision on dissertation;
2. **Scottish Natural Heritage:** field classes to lowland raised bogs, supervision on honours dissertation, work placement, study sites for field work, provision of volunteer work for students;
3. **Wildfowl and Wetlands Trust:** field classes to Caerlaverock, work placement;
4. **Royal Society for the Protection of Birds:** work placement, study site for field work, field classes to RSPB Mersehead, provision of paid and volunteer work for students;
5. **Forestry Commission:** field class to Ae Forest; lecture on Level 2 course;
6. **Barony College:** field class to Carse of Ae Trout Farm, lecture on Level 2 course, work placement;
7. **Scottish Agricultural College (Dumfries):** lecture on Level 2 course, field classes and farm visits, study site for field work;
8. **Dumfries and Galloway Environmental Records Centre:** lecture on Level 3 course, work placement; provision of paid and volunteer work for students.
9. **Airtricity:** lecture on level 1 course, field class to Dalswinton wind farm.

The involvement of these organisations in the past resulted in many work placement opportunities which have improved the employability of many of the graduates of the programme.

Student support systems

² www.qaa.ac.uk/academicinfrastructure/benchmark/statements/EarthSciences.pdf

³ http://www.opsi.gov.uk/legislation/scotland/acts2009/pdf/asp_20090012_en.pdf

⁴ http://www.eauc.org.uk/scotlands_principals_climate_commitment

Students will automatically be assigned an Adviser of Studies at the Dumfries Campus. They will also have available the support of the Effective Learning Tutor at the campus, and for those with specific educational needs, Enabling Support Advisers.

Students at the Dumfries Campus also have access to the team in Student Services (<http://www.gla.ac.uk/departments/dumfriescampus/currentstudents/studentsservices/>).

Support for students is also provided by University resources such as:
the Student Counselling and Advisory Service (<http://www.gla.ac.uk/services/counselling/>);
the Student Disability Service (<http://www.gla.ac.uk/services/studentdisability/>);
and the Careers Service (<http://www.gla.ac.uk/services/careers/>).

IT facilities

Students are expected to carry out a variety of tasks using computers (e.g. word-processing reports, essays, on-line learning (Moodle), and plagiarism prevention software (Turnitin)) and staff will keep in contact with students via e-mail. Students will have access to the computing labs at the Dumfries Campus – these are equipped with modern PCs running a range of word-processing, database, modelling, and statistical software.

Employability

The programme is designed with employability in mind and students are specifically encouraged to engage with their own skills development and learning throughout. All students are provided with a supported opportunity to undertake a work placement for one semester. The value of this in terms of student employability cannot be overestimated. Students will also have the opportunity to develop personal development portfolios using Mahara.

Laboratory facilities

Students have full access to a well-equipped laboratory within which they can conduct self-study and complete projects.

Field sites

The Campus is situated on an award-winning parkland estate, with extensive lawns, attractive sandstone buildings and wide biodiversity. This location in Dumfries means that there is easy access to a wide range of important sites which illustrate key areas of study in the curriculum.

Feedback from students

The Dumfries Campus has a Staff Student Liaison Committee in which student representatives may obtain further information about administrative matters, raise concerns and suggest improvements to their courses. Students will also be given the opportunity to provide feedback on a course by course basis.

16. Academic Session:

2010-11

Additional Administrative Information to be completed:

17. Fee Type:

Standard

18. Attendance Type:

Both Full Time and Part Time

Date of production/revision:

20/07/2010