Programme Specification

Programme award and title: BSc, BSc (Hons) Environmental Science

UCAS code: F900

SCQF Qualification Level: 10 | SCQF Credit Value: 484

Educational aims of the programme:
Concise (e.g. a few sentences), general statement of aims and broad purposes of the programme

- The environmental science programme aims to produce graduates with:
- An understanding of atmospheric, hydrological, geomorphological and ecological systems, the processes that underpin them and the drivers of change in these systems at a range of temporal and spatial scales.
- An understanding of the ecosystem services provided by the environment and the effects of human activities on these systems.
- An awareness of current environmental issues and their implications, and the management options available.
- A secure training in practical skills, problem-solving, investigative and research skills and generic skills that are relevant to future environmental and non-environmental employment.

Intended programme learning outcomes:
Outline (e.g. one or two paragraphs) of what the student will know, understand and be able to do as a result of their learning, expressed in the categories below. Please consider the contribution made to the student's personal development planning (PDP) and future employability.

Knowledge and understanding
- Understanding of the key theories, principles and concepts in Environmental Science covering the biosphere, hydrosphere, geosphere and atmosphere and awareness of the fundamental processes that underpin these.
- Appreciation of the key current environmental management challenges and options.
- Application of knowledge to address a range of environmental problems and issues.
- Analysis and synthesis of information from a variety of sources.
- Formulation and testing of hypotheses using appropriate and available lines of evidence.

Subject-specific skills and other attributes
- Planning and conducting an original research investigation.
- Sampling properties of the environment.
- Collecting and recording data using a range of field and laboratory techniques.
- Data analysis using a range of appropriate statistical methods and packages.
- Interpretation of environmental data and awareness of data limitations.
- Reporting the results of investigations with appropriate referencing of sources of information.

Working in a safe and responsible manner in the field and laboratory.

Generic skills (e.g. information skills, communication skills, critical, analytical and problem-solving abilities) and other attributes
- Written, graphical and verbal communication.
- Data analysis, integration and interpretation.
- Critical assessment.
- Team working.
- Peer assessment.
- Independent learning towards academic and personal goals.
- Library research skills.
- IT skills including word processing, spreadsheets and GIS.
- Use of internet, bibliographic databases and other electronic information sources.
- Ability to operate effectively in a work environment.
### Learning, teaching and assessment strategies:
Outline (e.g. one or two paragraphs) on overall approach taken to develop and assess learning outcomes, including any distinctive features

- **Learning**
  - The Environmental Science degree programme is structured in hierarchical, modular format. Students pursue their degree both full time and part time, progressing through stand alone but coherent modules. During the first two years students study basic environmental science processes and take modules that equip them with the basic laboratory, field and statistical skills they require for more advanced study. The knowledge and skills developed in modules taken during the first two years are required for, and further developed in, more advanced full and half modules taken in years three and four that are based on lecturers research interests. The range of modules offered at this advanced stage include specialist skills such as remote sensing and GIS, environmental management issues such as water and pollution management, or agriculture and food security, and specialist areas of research such as Quaternary Environmental Change and Geoarchaeology.

- **Teaching**
  - Most modules consist of lectures and practical work although the emphasis on one or the other depends on the specific module. Modules taken in the first two years place more emphasis on directed learning. In more advanced modules taken in years three and four there is more emphasis on independent learning and its communication in oral presentations, seminars and supervised project work.

- **Assessment**
  - Students are assessed by a diversity of methods which include
  - written or practical examinations completed within a restricted timeframe
  - coursework based on field, library or laboratory research, which has substantially longer deadlines than examinations for completion.
  - A final year thesis which reports the findings of their honours research project completed during their fourth year.
  - A range of assessment methods are used including short answer or multiple choice examinations and class quizzes, online tests and exercises, extended essays, practical reports, field sketches and drawings, maps, field and laboratory notebooks, oral presentations, seminar performance. All work is marked by academics but an element of peer assessment is included in certain modules.

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<th>Professional/statutory body accreditation or recognition:</th>
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### Further details:

- **Entry requirements:** [http://www.external.stir.ac.uk/undergrad/entry_reqs/index.php](http://www.external.stir.ac.uk/undergrad/entry_reqs/index.php)
- **Programme structure:** [http://www.calendar.stir.ac.uk/](http://www.calendar.stir.ac.uk/)
- **Relevant Subject Benchmark statement:** [http://www.qaa.ac.uk/academicinfrastructure/benchmark/default.asp](http://www.qaa.ac.uk/academicinfrastructure/benchmark/default.asp)
- **Scottish Credit and Qualifications Framework:** [http://www.scqf.org.uk/the_framework.asp](http://www.scqf.org.uk/the_framework.asp)
- **Introduction/revision date:** 09/2/2011