Programme Specification

<table>
<thead>
<tr>
<th>Programme award and title:</th>
<th>BSc honours Biology and Environmental Science</th>
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<tbody>
<tr>
<td>UCAS code:</td>
<td>UCX16-BIOENS</td>
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<tr>
<td>SCQF Qualification Level:</td>
<td>10</td>
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<tr>
<td>SCQF Credit Value:</td>
<td>484 credits (Level 8-10)</td>
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**Educational aims of the programme:**
Concise (e.g. a few sentences), general statement of aims and broad purposes of the programme

- The programme aims to give students:
  - Key biological science knowledge which is necessary for an appreciation and understanding of the processes which contribute to the survival of the major kinds of living organism on Earth.
  - An understanding of the key atmospheric, hydrological, geomorphological and ecological systems at a range of temporal and spatial scales.
  - An understanding of the effects of human activities on these systems and how environmental resources can be assessed.
  - An understanding of current environmental issues and the theoretical and practical basis for environmental management, planning and conservation.
  - Training in selected practical skills, problem-solving, investigative and research skills and generic skills that are relevant to future employment.
  - The opportunity to pursue modules in Biological Sciences and Environmental Sciences which are most appropriate to the combined subject so that there is scope to see the crosstalk in their teaching and learning in two disciplines and the scope to develop skills which amalgamate the two subjects whenever the opportunity arises.
  - The scope to develop their talents and their broader education so that they can pursue their future within and beyond the Biological Sciences.

**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**
- On the biological side: the molecular, physiological, structural diversity in living organisms, the innate linkage between organismal structure and function, and the interactions between organisms as communities within ecosystems and the balances which operate between organisms and their resources.
- On the environmental science side: structure and functioning of near-surface environmental systems, inter-relationships and interdependency of environmental systems, environmental change at different temporal and spatial scales, interactions of human activities with natural environmental systems at different time periods, role of society in managing and regulating environmental systems, environmental issues in a scientific and cultural context.

**Subject-specific skills and other attributes**
- The ability to construct and test scientific hypotheses.
- An understanding of the scientific method as it is applied to biology, its practice in both the field and the laboratory classes and its reporting in a format that is accepted by the scientific community generally.
- Sampling properties of the environment.
- Collecting and recording environmental data using a range of field and laboratory techniques.
- Working in a safe and responsible manner in the field and laboratory.
- Analysis and critical interpretation of environmental data and awareness of data limitations.
- Reporting the results of investigations with appropriate referencing of sources of information.
### Generic skills (e.g. information skills, communication skills, critical, analytical and problem-solving abilities) and other attributes

- Communication; using a wide range of written, electronic and oral methods with an emphasis on concision and coherence.
- Multi-tasking; an ability to manage resources as both time allocation and effective effort to produce outcomes to strictly enforced deadlines and to complete a number of demanding tasks within the same time frame.
- IT: word-processing, assembly and manipulation of spreadsheets and statistical packages. Production of computer based visual aids to communication.
- Team working;
- Independent learning towards academic and personal goals;
- Library research skills, including the use of internet, bibliographic databases and other electronic information sources;
- Critical analysis.

### 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

- The first two years of the combined degree programme can be constructed so as to include the same core modules in Biology and Environmental Science as all other programmes in these area. This strategy ensures students on the combined degree still have a breadth of knowledge in the core foundations to all aspects of Biology. Students also have the option to combine their two degree subjects with Practical Skills modules which gives them the flexibility to opt for a single Honours degree at the end of the first year. In years three and four the range of modules available to students on the combined degree are more research focussed and allow the students to acquire specialist skills and knowledge relevant to their future employment.
- Students on this programme are assessed by a diversity of methods which include written or practical examinations and coursework. In examinations students are assessed on their ability to show their breadth of knowledge, their skills at data handling and problem solving. Coursework assessment includes practical reports, maps and field sketches, laboratory and field note books, essays and extended essays, seminars, oral presentations and a final year dissertation or small research project.

### Professional/statutory body accreditation or recognition:

| Professional/statutory body accreditation or recognition: | n/a |

### 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:** 8/3/2011