Programme Specification

Programme award and title: Animal Biology

UCAS code: C300

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 aim of the programme is to provide students with a basic understanding of Biological Sciences with more advanced knowledge in the biology of animals. The modules supporting the more advanced honours section of the programme fall into two main groups: those focusing on animal ecology, behaviour and conservation i.e. the biology of whole animals; and those focusing on the molecular and physiological structure and function of components of animals. The programme is designed so that it will allow students to select whether they focus on one of these two aspects of animal biology or choose a balanced mixture of the two. The programme will provide students with experience of working with/on animals in both the laboratory and the field. Students completing this programme should be able to pursue careers in either or both as a field biologists working on animal conservation/ecology/behaviour as a laboratory-based animal biologist.

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
- Basic knowledge and understanding of molecular and cellular biology
- Basic knowledge and understanding of the physiology of organisms
- Basic knowledge and understanding of organismal, population, community and ecosystem level ecology
- Basic knowledge and understanding of the evolution and taxonomy of the major biological taxa
- Basic and advanced knowledge and understanding of experimental methodology and statistical design
- Advanced knowledge and understanding of animal physiology
- Advanced knowledge and understanding of animal ecology and behavioural ecology
- Advanced knowledge and understanding of the molecular and cellular biology of animals
- For those wishing to pursue a career in animal conservation: advanced knowledge and understanding of animal conservation, habitat management, restoration ecology and conservation genetics.
- For those wishing to pursue a career as a laboratory animal biologists, an advanced level knowledge of modern molecular biological techniques and proteomics.

Subject-specific skills and other attributes
- The ability to formulate a testable scientific hypothesis
- Ability to apply scientific methodology in order to test a specific hypothesis.
- The ability to be able to read and understand animal biology papers.
- The ability to acquire, analyse and synthesize information from a variety of sources
- The ability to critically appraise their own research and and the scientific research published in the literature.
- Be able to plan, conduct, and present both orally and in the form of a report a complete and novel scientific study.
- Ability to carry basic laboratory skills of a research animal biologist.
- Ability to observe and study animals in nature.
- An ability to identify key animal taxa
- An ability to work in the laboratory or the field in a safe and responsible manner

Generic skills (e.g. information skills, communication skills, critical, analytical and problem-solving abilities) and other attributes

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- Ability to write in a concise and informative manner using word processing packages
- Ability to give a clear and concise powerpoint presentation
- Ability to use basic data handling, processing and analytical software.
- The ability to work independently
- The ability to use a library efficiently and effectively and in a considerate manner
- Ability to work as part of a team
- Ability to follow instructions from a supervisor

**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 programme is structured in a hierarchical, modular format which allows students to follow two distinct routes depending upon their interests. Each of the modules can function as a stand-alone unit but they together form a coherent structure that forms a progressive programme. During the first two years students acquire basic laboratory and field skills and a basic knowledge and understanding of the biological sciences as a whole. This enables them the flexibility to switch to several other biological science and other related degree programmes. The knowledge and understanding acquired during the first two years then forms the foundation of the more advanced Honours level programme specific modules.
- Most modules use coursework and exam assessments and are taught by adopting a mixture of lecture and practical based techniques. Some of the practical work takes place in the field, occasionally in the form of residential field courses, of which there are two included in the programme. In Honours level modules, particular those in final year there is an increase in emphasis on independent learning. Students also have to conduct a final year honours dissertation, an independent piece of novel research.

**Professional/statutory body accreditation or recognition:**

**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)
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