ANIMAL BIOLOGY
Bsc (Hons)

ARE YOU STIRLING?
WHY STUDY ANIMAL BIOLOGY?
What determines variation in animal resistance to disease? Why do many animals exhibit mate choice, and what determines how much choice they exercise? How can we help animals cope in hostile environments? Study the enormous variety of animal life on Earth and help discover the answers to these and many other questions. Our faculty studies many facets of animal biology, including animal behaviour, ecology, evolution, cell biology and physiology as well as applied aspects of animal conservation and management.

COURSE DETAILS
Our programme aims to provide students with advanced knowledge in the biology of animals, focusing on either behaviour, ecology, evolution and conservation; or focusing on molecular biology and physiology. We emphasise key transferable skills that are in-demand by employers across the biological sciences.

FINAL YEAR DISSERTATIONS
The final honours year lays special emphasis on independent study through an individual research project.
Some recent projects have included:
• How ultraviolet floral phenotypes affect foraging behaviour in bumblebees
• Using camera traps to estimate species richness in African tropical forests
• Fitness consequences of advanced paternal age in wild Soay sheep
• The impact of radiation on life history in water fleas

FIELDWORK
Fieldwork is an essential part of an animal biologist’s training, and our campus location is ideal for making excursions, e.g., to study lekking Black Grouse in the Highlands or the distribution of animals on the Forth Estuary. Our programme includes a compulsory second year field class in Scotland, and two optional fourth year field courses (one on ecology and evolution in the Cévennes mountains of southern France, and one on tropical conservation biology at Lopé National Park in Gabon). Students must pay most of the costs of their travel, accommodation, and subsistence for the field courses.

REASONS TO CHOOSE THIS COURSE

1 FOCUS ON ENVIRONMENT
Our focus on interactions between people and the environment is ideal for studying animal populations, whose challenges include rapid human-induced environmental changes.

2 LINKS WITH EMPLOYERS
Stirling has the highest concentration of environmental and conservation organisations in the world, with 4x the national average of jobs in this sector. We have close links with many of these organizations!

3 STUDY IN A NATURAL SETTING
Why not study animals in their natural environment, on the most beautiful campus in Britain?
CAREER OPPORTUNITIES
Animal biologists work in the agriculture, pharmaceutical and biotechnology industries, and in conservation management and environmental agencies. Other career paths include: forensic sciences; teaching; the food industry; commercial analytical laboratories; statistical consulting; science communication; and, with further study, professions allied to medicine and in academic, government and industrial research laboratories.

“The lecturers were some of the most inspiring and friendly people that I have met. Their enthusiasm for their subjects is contagious. The courses have increased my enthusiasm for the study of biology, and made me many new friends for life.”

Axel Wiberg,
BSc (Hons) Animal Biology, 2013

MINIMUM REQUIREMENTS

YEAR 1 ENTRY – FOUR-YEAR HONOURS
SQA Highers:
AABB – one sitting
AAAB – two sittings
GCE A-levels:
BBB
IB Diploma:
32
BTEC (Level 3):
DDM
Essential subjects:
To include one of Biology, Chemistry, Mathematics or Physics.

YEAR 2 ENTRY – THREE-YEAR HONOURS
SQA Adv Highers:
ABB
GCE A-levels:
ABB
IB Diploma:
35
Essential subjects:
To include Biology and one of Chemistry, Environmental Science, Geography or Physics.

OTHER QUALIFICATIONS
Scottish HNC/HND:
Scottish HNC/D - Bs in graded units
Advanced entry
Please visit http://stir.ac.uk/ay
Essential subjects:
As listed above or equivalent.
Access courses
and other UK/EU and international

ADDITIONAL INFORMATION
General entrance requirements apply. Please visit http:\stir.ac.uk/avfor details.

PART TIME, ADVANCED ENTRY AND STUDY ABROAD OPTIONS AVAILABLE
**TYPICAL TIMETABLE**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SEMESTER</th>
<th>MODULE 1</th>
<th>MODULE 2</th>
<th>MODULE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Introduction to Ecology</td>
<td>Laboratory Skills</td>
<td>Option subject</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Introduction to Physiology</td>
<td>Field skills</td>
<td>Option subject</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Evolution &amp; Genetics</td>
<td>Introduction to Cell Biology</td>
<td>Biology Field Course</td>
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<tr>
<td></td>
<td>4</td>
<td>Biodiversity</td>
<td>Statistical Techniques</td>
<td>Option subject</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Animal Physiology</td>
<td>2 options from: Population and Community Ecology; Enzymes and their Applications; Microbiology; Habitat Management and Restoration; Environmental Policy &amp; Management</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>Individual Research Project (3 modules)</td>
<td></td>
<td>Choice of four-six half modules from a range of options (see below)</td>
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</tbody>
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**COMPULSORY MODULES**


**OPTIONAL MODULES IN YEAR FOUR (THESE MAY VARY YEAR TO YEAR):**

Honours Field Course in Ecology and Evolution; Honours Field Course in Tropical Conservation; Conservation Biology; The Evolution of Sex; Molecular Techniques; Tropical Ecology; Sustainable Water Management; Energy and Society; Molecular Evolution and Phylogenetics; Genetic Engineering for the Future; Immunology and Evolution of Infectious Disease; Cell Birth, Life and Death; Proteomics; Statistics Using R.

**CONTACT**

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