Programme Specification

BSc (Hons) Zoology: 2020-21
Subject to revalidation

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 s/he takes full advantage of the learning opportunities that are provided.

Awarding Institution: University of Southampton
Teaching Institution: University of Southampton
Mode of Study: Full-time
Duration in Years: 3 years, following standard progression for a full-time student
Accreditation details: Not applicable
Final award: Bachelor of Science – Honours
Name of award: BSc (Hons) Zoology
Interim Exit awards: Bachelor of Science (Ordinary), Diploma of Higher Education, Certificate of Higher Education
FHEQ level of final award: 6
UCAS code: C300
QAA Subject Benchmark or other external reference: QAA Subject Benchmark Statements for Bioscience (2007), QAA Framework for Higher Education Qualifications (FHEQ)
Programme Lead: Dr N Gostling
Date specification was written: 2005/2006
Date specification was validated: December 2017
Date specification was last updated: March 2019

Programme Overview

Brief outline of the programme

Zoology is the branch of biology dealing with the study of the structure, molecular and cell biology, development, ecology, evolution and classification of animals. At Southampton our expertise stretches from evolution and behaviour to gene regulation, neuroscience and development in a range of animals. You can select one of 3 optional themed pathways (General, Cell and Development; Ecology and Evolution) depending on where your interests lie.

Learning and teaching

A broad range of methods will be employed, including a combination of lectures, tutorials, practical classes, coursework, field-course and projects. In part 3 you will undertake an independent research project from the range of 15ECTS and 7.5ECTS projects on offer (a total of 15ECTS of project work must be undertaken).

Throughout the programme you are required to undertake independent reading both to supplement and consolidate the taught material and to broaden your knowledge and understanding of zoology.

Assessment

Assessment of your knowledge base is through a combination of written examinations and assessed coursework in the form of laboratory and fieldwork practical reports, essays, and project reports and presentations.

Please note: As a research-led University, we undertake a continuous review of our programmes to ensure quality enhancement and to manage our resources. As a result, this programme may be revised during a student’s period of registration, however, any revision will be balanced against the requirement that the student should receive the educational service expected. Please read our Disclaimer to see why, when and how changes may be made to a student’s programme.
Programmes and major changes to programmes are approved through the University’s programme validation process which is described in the University’s **Quality Handbook**.

**Educational Aims of the Programme**

The aims of the programme are to:

- a stimulating, informed learning environment through a wide range of interesting and contemporary modules, with flexibility of choice, allowing you to increasingly focus as you progress from level to level;
- the opportunity to develop a knowledge and understanding of living organisms at several levels of zoological and biological organisation from the molecular, through to cells and whole organisms and ecosystems; all from an evolutionary perspective;
- an understanding of zoological systems and processes in theory and practice;
- exposure to a range of zoological concepts and core information on evolution;
- training in relevant laboratory and field work skills;
- an opportunity to develop a range of transferable skills (information and communication technology, team working, written and oral communication, time management, planning, data collection and presentation) and the capacity to give a clear and accurate account of the subject;
- an opportunity for you to develop the ability to think critically and to show that you can pursue independent study;
- an independent research project on a zoological topic;
- an education and training suitable for a wide variety of careers and to prepare you for higher degrees and careers in biological sciences research;
- the capability of life-long learning, study and enquiry.

**Programme Learning Outcomes**

Having successfully completed this programme you will be able to:

1. show knowledge and understanding of a range of topics relevant to Zoology, as detailed in the LOs for the core and compulsory modules for this programme
2. use a range of practical skills and techniques relevant to Zoology, as detailed in the LOs for the core and compulsory modules for this programme
3. utilise methods and experimental designs to address zoological problems and questions
4. collect and analyse experimental data
5. interpret and write up the results of experiments
6. create and deliver a presentation on a topic relevant to Zoology
7. conduct research into an area of science relevant to Zoology
8. produce a dissertation, based on scientific research
9. have an appreciation of the ethical and societal aspects of research in the biosciences

**Teaching and Learning Methods**

Taught material will be delivered using lectures, tutorials, laboratory and field-based practicals and projects. Further self-learning through additional reading and research is expected. In addition to the methods described above, analysis and problem solving are further developed in tutorials and laboratory practicals. Practical and research skills are further developed through laboratory work and projects. You will be helped to acquire these skills through aspects of the formal teaching programme. In parts 1 and 2, this will mainly be through tutorial and coursework, whilst in part three your project work will enable you to further develop and practice many of the individual skills in one major activity.

**Assessment methods**

Experimental and research skills are assessed through some or all of the following: laboratory reports, project reports and presentations, final year research project or dissertations. Analysis and problem solving skills are assessed through unseen written examinations, continual assessment, practical write-ups and computer-based exercises. Experimental and research skills are assessed through some or all of the following: laboratory reports, project reports and presentations, final year research project or dissertations.
Programme Structure

Typical course content

The programme of study is divided into modules. Each module is assigned a number of credit points (ECTS = European Credit Transfer Scheme) that relates to the hours of formal teaching plus the recommended time for private study (1 ECTS = 20 hours of total student effort). For each part you will take certain core and compulsory modules and a selection of approved optional modules to give a minimum of 60 ECTS.

The Zoology degree has three advisory pathways from part 2: General Zoology (General), Cellular & Developmental Zoology (Cell/Dev) and Ecological & Evolutionary Zoology (Eco/Evo). The pathways are suggested groups of modules whose subject matter cover the pathway themes; you may select your own choice of modules at each level to reflect your development of interests in Zoology. The selection of modules is in consultation with your tutor and must conform to the degree programme regulations and undertaking prerequisite modules for more advanced FHEQ Level 5 and 6 modules.

The zoology degree programme is offered as either a full-time three-year course or part-time, leading to a BSc Honours degree in Zoology. If you wish to pursue this degree by part-time study you will need to take between 15 ECTS and 37.5 ECTS each year.

Where optional modules have been specified, the following is an indicative list of available optional modules, which are subject to change each academic year. Please note in some instances modules have limited spaces available.

Special Features of the Programme

This programme involves a mandatory field course organised by the university which is held in Spain during the Easter break of part 1. Additionally there is the opportunity to take a further optional field course module in part 2 (New Forest field course) and/or part 3 (Tropical Ecology Field course in Belize) or to carry out field-based project work in part 3.

Our links with institutions undertaking zoological research enables us to integrate their expertise within the Zoology degree; for example Marwell Zoological Park and Southampton General hospital are both used in the undergraduate programme. Opportunities exist to undertake part 3 research projects at these or many other sites.

Programme details

Part 1 (FHEQ Level 4)

In part 1, students are required to complete eight modules (nine if CHEM1012 must be taken) which includes seven compulsory modules.

Students who have not taken A-level Chemistry are required to take CHEM1012 Introduction to Chemistry, which will provide sufficient background and insight into the subject for further studies. If you are required to take CHEM1012, this must be passed to allow progression to part 2 but will not be used to calculate your part 1 average.

One further module (total 7.5 ECTS) must be chosen and this can be from outside Biological Sciences – modules with a zoological emphasis are encouraged.

The modules in Part 1 will provide a sound understanding and knowledge of the fundamental aspects of biological science, covering physiology, molecular, cell biology and genetics and a solid introduction to zoology.

| BIOL1001 Experimental & Field Biology | Compulsory |
| BIOL1003 Ecology and Evolution |
| BIOL1004 Patterns of Life |
| BIOL1005 Cell Biology & Genetics |
| BIOL1010 Macromolecules of Life* |
Part 2 (FHEQ Level 5)

In part 2, five modules are compulsory, and a sixth module must be taken from a choice of two. Note that BIOL2001 must be passed in order to be allowed to take BIOL3010 in part 3; BIOL2003 must be passed in order to be allowed to take BIOL3006 in part 3; BIOL2008 must be passed in order to be allowed to take BIOL3034, BIOL3061, BIOL3062, BIOL3069 or BIOL3071 in part 3.

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Name</th>
<th>General</th>
<th>Cell/Dev</th>
<th>Eco/Evo</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL2001</td>
<td>Evolution</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>BIOL2008</td>
<td>Quantitative Methods in Biological &amp; Environmental Science</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>BIOL2039</td>
<td>Animal Behaviour</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>BIOL2045</td>
<td>Vertebrate Development</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>SOES2011</td>
<td>Marine Vertebrates</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>BIOL2018</td>
<td>Adaptive Physiology</td>
<td>C**</td>
<td>C**</td>
<td>C**</td>
</tr>
<tr>
<td>BIOL2040</td>
<td>Neural Basis of Behaviour</td>
<td>C**</td>
<td>C**</td>
<td>C**</td>
</tr>
</tbody>
</table>

Additional modules may e.g. be selected from:

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Name</th>
<th>General</th>
<th>Cell/Dev</th>
<th>Eco/Evo</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL2002</td>
<td>Cell Biology</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL2007</td>
<td>Plant Development and Function</td>
<td>R</td>
<td>R</td>
<td></td>
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<tr>
<td>BIOL2010</td>
<td>Flow of Genetic Information</td>
<td></td>
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<tr>
<td>BIOL2011</td>
<td>Molecular &amp; Cell Biochemistry</td>
<td></td>
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<tr>
<td>BIOL2012</td>
<td>Exploring Proteins: Structure and Function</td>
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<tr>
<td>BIOL2013</td>
<td>Bioinformatics and DNA technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL2014</td>
<td>Neuroscience</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL2018</td>
<td>Adaptive Physiology</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>BIOL2022</td>
<td>Immunology, Infection and Inflammation</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL2038</td>
<td>Microbiology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL2040</td>
<td>Neural Basis of Behaviour</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL2041</td>
<td>New Forest Field Course</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL2043</td>
<td>Biotechnology &amp; the Living Cell</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL2044</td>
<td>Medical Microbiology</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL2047</td>
<td>Animal Conservation</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOES2017</td>
<td>Ecological Processes in the Marine Benthos</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>SOES2032</td>
<td>Palaeobiology</td>
<td></td>
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</tr>
</tbody>
</table>

C=compulsory modules (must take); C** = at least one of these 2 modules must be taken; R = Recommended

A maximum of 2 modules can be taken from outside Biological Sciences and of these not more than one can be a UOSM coded module.

BIOL2042 Biological Sciences Study Abroad. There is an opportunity to carry out studies during semester 2 of year 2 at one of several partner universities outside the UK. Specific module choices available will be dependent on the university selected and further information should be obtained from the module coordinator.

Part 3 (FHEQ Level 6)

In part 3, students must undertake a compulsory independent research project(s) totalling 15 ECTS, which has to be on a zoological topic to be selected from the following options:

i) Laboratory research project BIOL3034,
ii) Field research project BIOL3061
iii) Bioscience Business BIOL3058
iv) Bioscience Education BIOL3059
v) In silico research project BIOL3069
vi) External Research Project BIOL3071

Alternatively a combination of 2 single modules each 7.5ECTS (15 CATS in total) may be chosen from the selection below with one module to be completed in each semester. These must be focussed on a topic relevant to zoology.

i) Literature-based research project (BIOL3031 semester 1)
ii) Literature-based research project (BIOL3032 semester 2)
iii) Short field project BIOL3062 (Semester 1)
iv) Science communication BIOL3060 (semester 1)
v) Extended Science communication BIOL3066 (semester 2)*
vi) Bioethics research project BIOL3073 (semester 2)

*BIOL3060 is an essential prerequisite in order to take BIOL3066. It is not permitted to take both BIOL3031 and BIOL3032.

A further 45 ECTS (90 CATS) must be selected with a minimum of 30 ECTS of Zoology (Z) designated modules. Up to a maximum of 2 modules (15ECTS) can be chosen from outside Biological Sciences.

**Zoology (Z) modules**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>General</th>
<th>Cell/Dev</th>
<th>Eco/Evo</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL3001</td>
<td>Current Topics in Cell and Developmental Biology</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3006</td>
<td>Cellular and Genetic Aspects of Animal Development</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3056</td>
<td>Global Change Biology: Molecules to Ecosystem</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3053</td>
<td>Biodiversity &amp; Conservation</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3009</td>
<td>Applied Ecology</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3010</td>
<td>Topics in Ecology and Evolution</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3020</td>
<td>Systems Neuroscience</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3021</td>
<td>Cellular &amp; Molecular Neuroscience</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3067</td>
<td>Evolution &amp; Development</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3070</td>
<td>Tropical Ecology Field Course</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3072</td>
<td>Behavioural Ecology</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>

Other optional modules can be selected from those shown in the table below or from outside Biological Sciences to make the required number of ECTS.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>General</th>
<th>Cell/Dev</th>
<th>Eco/Evo</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL3003</td>
<td>Plant Cell Biology</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3012</td>
<td>Cell Membranes</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3013</td>
<td>Molecular Recognition</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3014</td>
<td>Molecular Cell Biology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3015</td>
<td>Regulation of Gene Expression</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3017</td>
<td>The Molecular &amp; Structural Basis of Disease</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3018</td>
<td>Molecular Pharmacology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3052</td>
<td>Biomedical Technology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3022</td>
<td>Cell Signalling in Health and Disease</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3025</td>
<td>Neuropharmacology of CNS Disorders</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3027</td>
<td>Selective Toxicity</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3037</td>
<td>Immunology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3048</td>
<td>Neurodegenerative Disease</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3051</td>
<td>Applied Plant Biology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3057</td>
<td>Biofilms &amp; Microbial Communities</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>BIOL3063</td>
<td>Bioinformatics &amp; Systems Biology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3064</td>
<td>Cancer and Chromosome Biology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3065</td>
<td>Biomedical Parasitology</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL3068</td>
<td>Fluxes Cycles &amp; Microbial Communities</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>

A maximum of 2 modules can be taken from outside Biological Sciences and of these not more than one can be a UOSM coded module. Any Language modules taken in Year 3 must be at stage 4 or above.

Revisions of the contents of the programmes for Part 3 are made periodically to reflect developments at the frontiers of zoology.
BSc Zoology with a ‘Minor’ subject

The structure of your degree programme allows you to exercise choice in each year of study. You can exercise this choice in a number of ways.

- You can use these modules to deepen your knowledge of your main subject.
- You can combine additional modules from your main subject with modules from the other disciplines or choose from a selection of interdisciplinary modules.
- You can choose modules that build into a minor pathway, the title of which will be included in your degree transcript.

Details of the minors available and the modules that are included can be found at http://www.southampton.ac.uk/cip/information_for_students/minor_subjects/index.page

Additional Costs

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. Costs that students registered for this programme typically also have to pay for are included in Appendix 2.

Progression Requirements

The University regulations governing progression, determination and classification of results in general can be found in the University Calendar (Section IV – General Regulations) https://www.southampton.ac.uk/calendar/sectioniv/index.page

Those specific to the Faculty and your programme are in the University Calendar – http://www.calendar.soton.ac.uk

Intermediate exit points

You will be eligible for an interim exit award if you complete part of the programme but not all of it, as follows:

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Minimum overall credit in ECTS credits</th>
<th>Minimum ECTS Credits required at level of award</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc Ordinary degree</td>
<td>at least 150</td>
<td>30</td>
</tr>
<tr>
<td>Diploma of Higher Education</td>
<td>at least 120</td>
<td>45</td>
</tr>
<tr>
<td>Certificate of Higher Education</td>
<td>at least 60</td>
<td>45</td>
</tr>
</tbody>
</table>

Learning outcomes specific to each intermediate exit point correspond to a sub-set of those for the programme as a whole and may be determined by consulting the module map at the end of this document.

If you successfully complete part one you may switch to the degree programme in Biology, Ecology & Conservation, MSci Biology, MSci Zoology or MSci Ecology & Conservation.

Support for student learning

There are facilities and services to support your learning some of which are accessible to students across the University and some of which will be geared more particularly to students in your particular Faculty or discipline area.

The University provides:
- library resources, including e-books, on-line journals and databases, which are comprehensive and up-to-date; together with assistance from Library staff to enable you to make the best use of these resources.
• high speed access to online electronic learning resources on the Internet from dedicated PC Workstations onsite and from your own devices; laptops, smartphones and tablet PCs via the Eduroam wireless network. There is a wide range of application software available from the Student Public Workstations.
• computer accounts which will connect you to a number of learning technologies for example, the Blackboard virtual learning environment (which facilitates online learning and access to specific learning resources)
• standard ICT tools such as Email, secure filestore and calendars.
• access to key information through the MySouthampton Student Mobile Portal which delivers timetables, Module information, Locations, Tutor details, Library account, bus timetables etc. while you are on the move.
• IT support through a comprehensive website, telephone and online ticketed support and a dedicated helpdesk in the Hartley Library.
• Enabling Services offering support services and resources via a triage model to access crisis management, mental health support and counselling. Support includes daily Drop In at Highfield campus at 13.00 – 15.00 (Monday, Wednesday and Friday out of term-time) or via on-line chat on weekdays from 14.00 – 16.00. Arrangements can also be made for meetings via Skype.
• assessment and support (including specialist IT support) facilities if you have a disability, long term health problem or Specific Learning Difficulty (e.g. dyslexia).
• the Student Services Centre (SSC) to assist you with a range of general enquiries including financial matters, accommodation, exams, graduation, student visas, ID cards
• Career and Employability services, advising on job search, applications, interviews, paid work, volunteering and internship opportunities and getting the most out of your extra-curricular activities alongside your degree programme when writing your CV
• Other support that includes health services (GPs), chaplaincy (for all faiths) and 'out of hours' support for students in Halls and in the local community, (18.00-08.00)
• A Centre for Language Study, providing assistance in the development of English language and study skills for non-native speakers.

The Students’ Union provides
• an academic student representation system, consisting of Course Representatives, Academic Presidents, Faculty Officers and the Vice-President Education; SUSU provides training and support for all these representatives, whose role is to represent students’ views to the University.
• opportunities for extracurricular activities and volunteering
• an Advice Centre offering free and confidential advice including support if you need to make an academic appeal
• Support for student peer-to-peer groups, such as Nightline.

We aim to provide a friendly and supportive environment for you to pursue your studies. You will have a personal academic tutor to offer general help, advice and encouragement on academic and pastoral matters throughout your undergraduate career.

Associated with your programme you will be able to access:
• An induction programme at the start of the course, which will provide orientation, information on modules, courses, library and computer facilities.
• Programme handbooks, module handbooks and material on the web.
• Library and academic skill packages.
• Well-equipped laboratories.
• Academic and pastoral support from members of staff, including your academic tutor which will include scheduled meetings at appropriate occasions during the academic year.
• Access to all administrative and academic material on the CBS, Programme and individual module web sites and/or Blackboard (http://www.blackboard.soton.ac.uk).
• Access to all academic staff through an appointment system and e-mail.
• Access to administrative staff in the Faculty Student Offices during the normal working day.
• Feedback on assessment.

Methods for evaluating the quality of teaching and learning

You will have the opportunity to have your say on the quality of the programme in the following ways:

• Completing student evaluation questionnaires for each module of the programme
• Acting as a student representative on various committees, e.g. Staff/Student Liaison Committees, Faculty Education Committee OR providing comments to your student representative to feed back on your behalf.
• Serving as a student representative on Faculty Scrutiny Groups for programme validation
• Taking part in programme validation meetings by joining a panel of student to meet with the Faculty Scrutiny Group

The ways in which the quality of your programme is checked, both inside and outside the University, are:

• Regular module and programme reports which are monitored by the School
• Programme validation, normally every five years.
• External examiners, who produce an annual report
• A national Research Excellence Framework (our research activity contributes directly to the quality of your learning experience)
• Institutional Review by the Quality Assurance Agency
• The Academic Unit of Biological Sciences has an Education Executive that monitors and evaluates all aspects of learning and teaching at undergraduate level. It considers the results of student feedback and takes appropriate action to remedy any shortcomings. The Director of Programmes acts on the results of peer observation of teaching and reports from our External Examiners who are selected from comparator universities.

Further details on the University's quality assurance processes are given in the Quality Handbook.

Criteria for admission

The University’s Admissions Policy (see www.southampton.ac.uk/admissions-policy) applies equally to all programmes of study. The following are the typical entry criteria we use for selecting candidates for admission to our programmes.

Entry Requirements

These requirements are reviewed annually by our Admissions team. Those stated below were correct as of July 2017.

GCSEs:

We require Grades A-C in English, Mathematics and Science. If you lack these formal qualifications, your aptitude for the course will be assessed at interview. International students, whose first language is not English, must have already attained the necessary standard in English – see English Language Proficiency section below.

A Levels:

AAB (excluding general studies)

Biology must be offered at A-level along with at least one other A-level science subject

A-level Science subjects considered include:

<table>
<thead>
<tr>
<th>A-level Science A-levels</th>
<th>Biology (minimum grade B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry, Physics, Mathematics, Psychology, Environmental Science, Geology, Geography</td>
<td></td>
</tr>
</tbody>
</table>

Alternative qualifications
Our admissions requirement is normally defined on the basis of A/AS levels, but equivalent qualifications are accepted.

We do offer entry through a one year Science Foundation programme designed to enable you to qualify for entry to Honours degree programmes in Biological Sciences if you have not studied the appropriate Science subjects at GCE A level or equivalent standard. It is particularly appropriate if you are a mature student or if you have obtained good grades in non-science A levels.

We will also accept applications from candidates offering other equivalent qualifications including Scottish and Irish Highers, European and International Baccalaureate, Access and Foundation courses and overseas qualifications.

More information on the entry requirements for Zoology can be found via the biological sciences undergraduate webpage here - [http://www.southampton.ac.uk/biosci/undergraduate/courses.page](http://www.southampton.ac.uk/biosci/undergraduate/courses.page)

**English Language Proficiency**

All programmes at the University of Southampton are taught and assessed in the medium of English (other than those in modern foreign languages). Therefore, all applicants must demonstrate they possess at least a minimum standard of English language proficiency. Our minimum standard entry requirements are an IELTS Band C, i.e.

<table>
<thead>
<tr>
<th>Overall</th>
<th>Reading</th>
<th>Writing</th>
<th>Speaking</th>
<th>Listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5</td>
<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Information on all acceptable English Language Tests can be found on the University website: [www.southampton.ac.uk/admissions-language](http://www.southampton.ac.uk/admissions-language)

**Recognition of Prior Learning (RPL)**

The University has a Recognition of Prior Learning Policy. It may be possible to recognise formal credit for learning you have acquired in the past through formal study and/or through work and other life experiences. Your application will be considered on individual merit and you may be asked to attend an interview.

**Mature applicants:**

Studying for a degree later in life can be extremely rewarding and mature students are often among our most successful.

If you are over 21 and feel you would benefit from degree-level studies, we can be more flexible about our entry requirements. For full-time courses, selectors will expect you to demonstrate your commitment by means of some recent serious study, for example, one or two A-level passes, successful completion of an Open University foundation course or an appropriate Access course. Your application will be considered on individual merit and you may be asked to attend an interview.

Another popular option is to follow a certificate or diploma programme. These are available on a part time basis and most can be taken in the evenings, enabling you to continue to earn an income while you are studying.
Career Opportunities

With a BSc degree in Zoology you could be expected to find work in the following areas:

- Postgraduate study
- Teacher training
- Medicine
- Conservation and the environment
- Agriculture
- Industry
- Journalism

External Examiners(s) for the programme

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Claire Grierson</td>
<td>University of Bristol</td>
</tr>
<tr>
<td>Dr Sebastian Shimeld</td>
<td>University of Oxford</td>
</tr>
</tbody>
</table>

Students must not contact External Examiner(s) directly, and external examiners have been advised to refer any such communications back to the University. Students should raise any general queries about the assessment and examination process for the programme with their Course Representative, for consideration through Staff: Student Liaison Committee in the first instance, and Student representatives on Staff: Student Liaison Committees will have the opportunity to consider external examiners’ reports as part of the University’s quality assurance process.

External examiners do not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact their personal tutor in the first instance.

Please note: 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 s/he takes full advantage of the learning opportunities that are provided. More detailed information can be found in the programme handbook.
### Appendix 1:

#### Learning outcomes and Assessment Mapping

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL1020</td>
<td>Core Skills in the Life Sciences</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>BIOL1001</td>
<td>Experimental &amp; Field Ecology</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>BIOL1003</td>
<td>Ecology and Evolution</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL1004</td>
<td>Patterns of Life</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>BIOL1005</td>
<td>Cell Biology &amp; Genetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>BIOL1010</td>
<td>Macromolecules of life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>BIOL1012</td>
<td>Systems Physiology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>BIOL2001</td>
<td>Evolution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>BIOL2008</td>
<td>Quantitative Methods in Biological &amp; Environmental Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>BIOL2039</td>
<td>Animal Behaviour</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL2045</td>
<td>Vertebrate Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOES2011</td>
<td>Marine Vertebrates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>BIOL2018</td>
<td>Adaptive Physiology</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>BIOL2040</td>
<td>Neural Basis of Behaviour</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

#### Independent research project options

(BIOL3034/BIOL3061/3059/3069/3071/3073/3062/3060/3066/3032)
Appendix 2:

Additional Costs

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. In addition to this, students registered for this programme typically also have to pay for the items listed in the table below.

In some cases you’ll be able to choose modules (which may have different costs associated with that module) which will change the overall cost of a programme to you. Details of such costs will be listed in the Module Profile. Please also ensure you read the section on additional costs in the University’s Fees, Charges and Expenses Regulations in the University Calendar available at http://www.calendar.soton.ac.uk/.

<table>
<thead>
<tr>
<th>Main Item</th>
<th>Sub-section</th>
<th>PROGRAMME SPECIFIC COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Calculators</td>
<td></td>
<td>Candidates may use calculators in the examination room only as specified by the University and as permitted by the rubric of individual examination papers.</td>
</tr>
<tr>
<td>Stationery</td>
<td></td>
<td>You will be expected to provide your own day-to-day stationary items, e.g. pens, pencils, notebooks, etc. Any specialist stationery items will be specified under the Additional Costs tab of the relevant module profile.</td>
</tr>
<tr>
<td>Textbooks</td>
<td></td>
<td>Where a module specifies core texts these should generally be available on the reserve list in the library. However due to demand, students may prefer to buy their own copies. These can be purchased from any source. Some modules suggest reading texts as optional background reading. The library may hold copies of such texts, or alternatively you may wish to purchase your own copies. Although not essential reading, you may benefit from the additional reading materials for the module.</td>
</tr>
<tr>
<td>Equipment and Materials</td>
<td>Laboratory and Field Equipment and Materials:</td>
<td>All materials required for laboratory or field work are provided. Where necessary, suitable specialist safety equipment will be provided.</td>
</tr>
<tr>
<td>IT</td>
<td>Computer Discs or USB drives</td>
<td>Students are expected to provide their own portable data storage device.</td>
</tr>
<tr>
<td></td>
<td>Software Licenses</td>
<td>All software is provided</td>
</tr>
<tr>
<td></td>
<td>Hardware</td>
<td>It is advisable that students provide their own laptop or personal computer, although shared facilities are available across the University campus.</td>
</tr>
<tr>
<td>Clothing</td>
<td>Lab Coats and safety spectacles</td>
<td>One laboratory coat and a pair of safety spectacles are provided at the start of the programme to each student. If these are lost the student must replace them at their own expense. The Students Union Shop stock these items.</td>
</tr>
<tr>
<td></td>
<td>Field course clothing</td>
<td>You will need to wear suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source.</td>
</tr>
<tr>
<td>Printing and Photocopying Costs</td>
<td></td>
<td>Coursework such as essays; projects; dissertations may be submitted on line. In the majority of cases, though, students will be asked to provide a printed copy. The University printing costs are currently:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A4 - 4p per side (black and white) or 18p per side (colour)</td>
</tr>
</tbody>
</table>
### PROGRAMME SPECIFIC COSTS

<table>
<thead>
<tr>
<th>Main Item</th>
<th>Sub-section</th>
<th>A3 - 8p per side (black and white) or 35p per side (colour)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Please Note: Paper sizes not recognised by the printing devices will prompt you to select the size and then charge a minimum of 50p per black and white copy and a maximum of £1 per colour copy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You can pay for your printing by using the money loaders or by using print copy payment service by going to <a href="http://www.printcopypayments.soton.ac.uk">www.printcopypayments.soton.ac.uk</a> Please remember that we are unable to refund any credit that has not been used by the end of your course, so please consider this when topping up your printing/copy account.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The University Print Centre also offers a printing and copying service as well as a dissertation/binding service. Current printing and copying costs can be found here. They also provide a large format printing service, e.g. Academic posters. Details of current costs can be found here.</td>
</tr>
<tr>
<td>Fieldwork: Logistical costs</td>
<td>Accommodation:</td>
<td>For compulsory residential fieldcourses accommodation and travel are normally provided though where necessary, you will be expected to cover the cost of getting to and from the departure point which may be an airport. You are usually expected to cover the costs of food and drink, although some courses may include meals.</td>
</tr>
<tr>
<td></td>
<td>Insurance (travel/health):</td>
<td>For optional fieldcourses, you may be asked to make a contribution to the travel and/or accommodation costs.</td>
</tr>
<tr>
<td></td>
<td>Travel Costs:</td>
<td>Undergraduates are automatically covered under the University’s travel insurance whilst on organised and supervised fieldcourses. Those travelling independently in connection with their programme can be included under the University’s travel insurance upon application – there may be a cost attached to this.</td>
</tr>
<tr>
<td></td>
<td>Immunisation/vaccination costs:</td>
<td>There are also opportunities to undertake fieldcourses with another organisation, e.g. Operation Wallacea – for example see here. Where necessary students will need to arrange and pay for any vaccinations.</td>
</tr>
<tr>
<td></td>
<td>Other:</td>
<td>Specific details on what additional costs there are detailed in the individual module profiles which can be found under the modules tab of the programmes details of the relevant academic unit.</td>
</tr>
<tr>
<td>Placements (including Industrial Year out)</td>
<td>Students who choose to go on an industrial placement at the end of Part 2 can expect to cover costs for health and travel insurance, accommodation and living expenses; travel costs; visa costs. This will vary depending on which country you are travelling to.</td>
<td></td>
</tr>
<tr>
<td>Parking Costs</td>
<td></td>
<td>There may be a requirement to undertake work at Southampton General Hospital (SGH), for example during a final year research project. Students may need to cover costs for transport to travel to SGH or for car parking.</td>
</tr>
<tr>
<td>Main Item</td>
<td>Sub-section</td>
<td>PROGRAMME SPECIFIC COSTS</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Other</td>
<td>Travel Costs</td>
<td>Students who opt to undertake a module delivered at Marwell Wildlife will be responsible for their own travel expenses.</td>
</tr>
</tbody>
</table>

**Revision History**
1. Minor revisions (including title) 10 July 2007 (SCK)
2. New Brand added July 2008
3. Updated to reflect University restructuring June 2011 AB.
4. Revisions approved by Senate 19 June 2013 as part of new programme validation process
5. Minor changes made to form guidance on completion of Intended Learning Outcomes, and Learning outcomes and Assessment Mapping document template, for clarity; and changes to wording of support for student learning section, altering to second person throughout – agreed with the Chair and to be reported to UPC October 2013
6. Updated to new Prog Spec form February 2014 (version for 2013/14 Academic Year) CQA
7. Updated to take account of new Programme Specification template, September 2015
8. Minor updates following FEC April 2019