Programme Specification

BSc (Hons) Ecology: 2017-18

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	Ecology
Interim Exit awards	Bachelor of Science (Ordinary) Diploma of Higher Education Certificate of Higher Education
FHEQ level of final award	6
UCAS code	C181
QAA Subject Benchmark or other external reference	QAA Subject Benchmark Statements for Bioscience (2007) QAA Framework for Higher Education Qualifications (FHEQ)
Programme Coordinator	Dr A Marchant
Date specification was written	05/03/2015
Date specification was validated	07/10/2015
Date specification was last updated	July 2017

Programme Overview

Brief outline of the programme

Ecological science will play an essential role in tackling the global challenges of the 21st century. Understanding how organisms interact with one another and their relationship with the environment is vital to the management of ecosystems in response to environmental change. Building on a strong biological foundation, the Ecology programme at Southampton covers organism, population and community ecology and the application of practical solutions to current global challenges. Independent projects are a major component of the final year and provide experience in current ecological research, and/or science communication. You will undertake a balanced programme of study, gaining the relevant skills and knowledge for a career path in Ecology.

Learning and teaching

Over the three years a broad range of teaching methods are employed, including a combination of lectures, tutorials, practical classes and field-courses, in conjunction with coursework, and research projects. Throughout the programme you are required to undertake independent reading both to consolidate and supplement the taught material and to broaden your knowledge and understanding of ecology. Analysis, problem solving and research skills are further developed in the tutorials, laboratory practicals and project work. There are two compulsory field-courses during parts 1 and 2: a part 1 trip to Spain exploring the Mediterranean biome and an in-depth part 2 field-course in the New Forest. There are further opportunities for fieldwork in part 3, including options for overseas experience. In part 3 you will undertake either an in-depth research project, or two short projects: which can be literature-based, or a combination of a short research project, a literature-based project or a science communication project.

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. Experimental and research skills are assessed through an appropriate combination of laboratory reports, 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:

1. provide a stimulating, informed learning environment through a wide range of interesting and contemporary courses, underpinned by current world-class research.
2. provide a fundamental knowledge and understanding of living organisms across the levels of biological organisation from the molecular, through to cells, whole organisms and ecosystems and with an evolutionary perspective;
3. develop an understanding of ecological concepts and processes in theory and in practice, at levels from individuals, populations, and communities to landscape and global perspectives, underpinned by world class research
4. provide the opportunity to construct individual programmes of study within a coherent framework, including advanced concepts and techniques in biological topics of your choice;
5. provide training in relevant laboratory and field work skills;
6. develop a range of transferable skills (information and communication technology, team working, written and oral communication, time management, planning, data collection, analysis and presentation), and the capacity to give a clear and accurate account of the subject;
7. provide an opportunity for you to develop the ability to think critically and to show that you can pursue independent study;
8. support the completion of an independent research project on an ecological topic;
9. provide an education and training suitable for a wide variety of careers in industry and the public sector, and to prepare you for higher degrees in biological science research;
10. enable the capability of life-long learning, study and enquiry.

Programme Learning Outcomes

Knowledge and Understanding

Having successfully completed this programme you will be able to demonstrate knowledge and understanding of:

K1. the theoretical and applied basis biological science which underpins the study of ecology;
K2. relevant core concepts, principles, themes, terminology, and classification systems in the ecological disciplines covered;
K3. methods used and appropriate experimental designs to carry out surveys and investigations using current ecological concepts and practices;
K4. the analysis and interpretation of biological and ecological data across a range of applications;
K5. how the diversity of organisms on earth evolved, and how they are identified and classified;
K6. a detailed knowledge and advanced understanding within subject specific options selected from the range available;
K7. the ecological and evolutionary interactions of organisms with each other and the environment;
K8. the principles of nutrient and energy flow through individuals, populations and communities;
K9. distribution of organisms in relation to biotic and abiotic factors;

K10. population processes, dynamics and interactions, and associated theoretical models;
K11. community structure, development, biodiversity, and associated theoretical models;
K12. human interactions with and impacts on natural populations and ecosystems, including habitat modification, pollution, exploitation and conservation;
K13. the mechanisms for life processes and appreciate how the physiology of an organism makes it fit for its environment;
K14. concepts and values of biodiversity and the principles of a solution-conscious approach to conservation practices;
K15. the cellular and genetic mechanisms of animal and plant development, and how they function and interact with each other and their surroundings;
K16. the concept and application of ecosystem services relating to land-use management, food security and poverty alleviation;
K17. how plants and microbes are being utilised in the modern world in a wide range of applications;
K18. recent global changes in climate and land-use and the impacts of change on biodiversity, future food and resource supplies;
K19. current national and international initiatives and policies for conservation and environmental sustainability

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.

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.

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to:
S1. formulate and test hypotheses by planning, conducting and reporting a programme of research, through library-based material and practical-based;
S2. use laboratory and field equipment to generate data;
S3. demonstrate and apply a knowledge of experimental design and statistics to practical ecological problems;
S4. discuss and communicate biological and ecological concepts orally and in written form, and through IT delivery routes;
S5. critically evaluate biological and ecological information;

Teaching and Learning Methods

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.

Assessment methods

Experimental and research skills are assessed through some or all of the following: laboratory reports, project reports and presentations, part 3 research project or dissertations. Analysis and problem solving skills are assessed through unseen written examinations, continual assessment, practical write-ups and computer-based exercises.

Transferable and Generic Skills

Having successfully completed this programme you will be able to:

T1. communicate/present effectively in writing and verbally to both specialised and non-specialised audiences and cite reference work in an appropriate manner;
T2. solve numerical and other problems;
T3. work as a member of a team and engage in independent work;

T4. use information technology and other resources to find, extract and synthesise information;
T5. learn independently through critical enquiry;
T6. demonstrate you have the ability to undertake appropriate further training;
T7. manage your time in planning and conducting practical and library work;
T8. demonstrate competency at using field and laboratory skills in a safe and responsible manner.

Teaching and Learning Methods

You will be helped to acquire these skills through all aspects of the formal teaching programme. In Parts 1 and 2 this will mainly be through tutorial and coursework, whilst in Part 3 your project work will enable you to further develop and practice many of the individual skills in one specific area of biology.

Assessment methods

Your skills will be assessed as described above. Most skills are assessed through examinations, continuous assessment and through your part 3 project or dissertations.

Subject Specific Practical Skills

Having successfully completed this programme you will be able to:

P1. apply robust experimental design and statistics to specific ecological problems;
P2. demonstrate specialised knowledge of practical and laboratory-based techniques relevant to the modules selected.

Teaching and Learning methods

BIOL2008 is a compulsory module particularly aimed at developing skill P1 using lectures and practical problem solving. The compulsory Part 1 Field-course, optional Part 2 field course, practicals associated with part 1 and part 2 modules and the part 3 research project are all used to develop subject specific practical skills.

Assessment methods

Your skills will be assessed primarily through continual assessment and through the Part 3 research project or dissertations. Experimental and research skills are assessed through an appropriate combination of laboratory reports, project reports and presentations.

Graduate Attributes

Graduate attributes are the personal qualities, skills and understanding you can develop during your studies. They include but extend beyond your knowledge of an academic discipline and its technical proficiencies. Graduate attributes are important because they equip you for the challenge of contributing to your chosen profession and may enable you to take a leading role in shaping the society in which you live.

We offer you the opportunity to develop these attributes through your successful engagement with the learning and teaching of your programme and your active participation in University life. The skills, knowledge and personal qualities that underpin the graduate attributes are supported by your discipline. As such, each attribute is enriched, made distinct and expressed through the variety of learning experiences you will experience. Your development of graduate attributes presumes basic competencies on entry to the University.

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 (1ECTS = 20 hours of total student effort). In each part you will take certain core and compulsory modules and a selection of approved optional modules to give a minimum of 60 ECTS. A **core module** is one

that you must take and pass at 40% to progress to the next level of study whilst a **compulsory module** is one that you must take (but need not pass, however a minimum of 25% is required). **Optional modules** can be selected from a range of modules offered by Biological Sciences or modules offered by other University of Southampton academic units.

In part 1 there are a number of core and compulsory modules, which lay a solid foundation in biological science, which underpins the discipline of this programme. With progression to more specialised training and options that enable diversification commence in parts 2 and 3, this includes opportunities to take Curriculum Innovation modules (UOSM-coded modules). Curriculum Innovation modules are specifically designed to allow students to broaden their degree. Generally, students can only take a maximum of one UOSM module per Part. In part 3, students are exposed to the forefronts of the discipline's knowledge, with the opportunity to conduct supervised original research.

Special Features of the programme

Throughout the programme there is an emphasis on developing hands on practical experience and independent study. With the whole year attending the Part 1 field course to Spain (BIOL1001), with skills and knowledge further developed in practices sessions and the Part 2 field course in the New Forest (BIOL2041).

Programme details

Details of the Programme Structure may be found on the Academic Unit web http://www.southampton.ac.uk/biosci/undergraduate/courses/c181-bsc-ecology.page? (Where an indicative list of options can be found. We cannot guarantee to offer every option each year); in the Year Handbooks, http://www.southampton.ac.uk/studentservices/academic-life/faculty-handbooks.page and are briefly summarised below.

Part 1 (FHEQ Level 4)

In Part 1, you are required to do eight modules (students without Chemistry at A-level or equivalent will also have to take the CHEM1012 Chemistry module as a ninth module). Six modules are compulsory and one is core, (plus the CHEM1012 as a core module if it has to taken), one further module (total 7.5 ECTS) must be chosen; this can be from outside Biological Sciences – modules with ecological emphasis are encouraged e.g. marine ecology modules (SOES codes) or environmental modules (ENVS codes). 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 ecology, with modules on the main braches of ecology, evolution, research practice and first-hand experience in ecology methods. This is an indicative list of options/modules. We cannot guarantee to offer every option each year

Part 1: Modules	**Semester**	**Module type:** C=compulsory modules (must take) CP=core modules (must take and passed) R=recommended optional module, O=optional	**ECTS**
BIOL1004 Patterns of Life	1	C	7.5
BIOL1010 Macromolecules of Life*	1	C	7.5
BIOL1012 Systems Physiology*	1	C	7.5
BIOL1020 Core Skills in the Life Sciences	1&2	CP	7.5
CHEM1012 Introduction to Chemistry**	1	*(CP)	7.5
BIOL1003 Ecology and Evolution	2	C	7.5
BIOL1001 Experimental & Field Ecology	2	C	7.5
BIOL1005 Cell Biology & Genetics	2	C	7.5
Additional module may be selected from:			
BIOL1022 Metabolism & Metabolic Disorders	2	R	7.5
BIOL1023 Cell and Tissue Histology	2	R	7.5
BIOL1013 Integrative Mammalian Physiology	2	R	7.5
SOES1006 Introduction to Marine Ecology	2	O	7.5
Modules from other disciplines such as SOES1XXX, ENVS1XXX or a Language module		O	7.5

*BIOL1010 and BIOL1012 are default compulsory modules but can be substituted by BIOL1007 instead of BIOL1010, and/or BIOL1011 instead of BIOL1012.

If you decide at the start of semester 1 to choose either BIOL1022 or BIOL1013 as your elective module then you will have the option, subject to available space, to take BIOL1007 and/or BIOL1011 (which include laboratory practicals) in the first semester instead of the corresponding BIOL1010 and/or BIOL1012 (which have 'dry' computer practicals).

**If CHEM1012 must be taken.

Part 2 (FHEQ Level 5)

In Part 2, you are required to take eight modules. Four modules are compulsory and four are optional modules, where at least three are preferably BIOL modules. Note that BIOL2001 Evolution must be passed in order to be allowed to take BIOL3010 Topics in Ecology & Evolution in part 3; BIOL2008 Quantitative Methods in Biological & Environmental Science must be passed in order to be allowed to take the BIOL3034 Laboratory research project, BIOL3061 Field Research Project or BIOL3062 Short Field Project in part 3.

The modules in part 2 build on the basic biological and ecological principles laid down in part 1. Developing understanding and knowledge in evolution, population ecology, biodiversity and conservation priorities and gaining experience in valuable analytical, ecological survey, and taxonomic skills. With more flexibility in module choice providing opportunity to construct programmes of study, which include biological topics such as animal behaviour, plant science and marine ecology.

Part 2: Modules	**Semester**	**Module type:** C=compulsory modules (must take), CP=core modules (must take and passed), R=recommended optional module, O=optional	**ECTS**
BIOL2004 Pure & Applied Population Ecology	1	C	7.5
BIOL2008 Quantitative Methods in Biological & Environmental Science	1	C	7.5
BIOL2001 Evolution	2	C	7.5
BIOL2041 New Forest Field Course	2	C	7.5
Additional modules may be selected from:			
BIOL2039 Animal Behaviour	1	R	**7.5**
SOES2011 Marine Vertebrates	1	R	**7.5**
BIOL2007 Plant Development & Function	2	R	**7.5**
BIOL2003 Animal Reproduction & Development	2	R	**7.5**
BIOL2018 Adaptive Physiology	2	O	**7.5**
BIOL2038 Microbiology – from the natural environment to disease	2	O	**7.5**
BIOL2040 Neural Basis of Behaviour	2	O	**7.5**
BIOL2002 Cell Biology	1	O	**7.5**
BIOL2010 Flow of Genetic Information	1	O	**7.5**
BIOL2012 Exploring Proteins : Structure & Function	1	O	**7.5**
BIOL2013 Bioinformatics & DNA Technology	2	O	**7.5**
BIOL2014 Neuroscience	1	O	**7.5**
BIOL2043 Biotechnology & the Living Cell	1	O	**7.5**
BIOL2044 Medical Microbiology	2	O	
Any relevant SOES2XXX, ENVS2XXX or GEOG2XXX module		O	**7.5**

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.

Part 3 (FHEQ Level 6)

In Part 3 there is increased emphasis on the practical and theoretical aspects of ecological research with 15 ECTS either as a single 15 ECTS module or two 7.5 ECTS modules. This will allow you to carry out an extensive piece of work related to your interests and develop knowledge of experimental design, statistics and critical evaluation to practical ecological problems. The remaining 45 ECTS comprise of six modules; FOUR of which must be selected from a set of BIOL modules (BIOL3009, BIOL3053, BIOL3010, BIOL3056, BIOL3067 and BIOL3070), and the 2 remaining modules selected from optional BIOL3XXX, SOES3XXX, ENVS3XXX modules, or modules relating to a specific 'Minor' subject. 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.

Part 3: Modules	**Semester**	**Module type:** C=compulsory, CO=compulsory options, R=recommended, O=optional	**ECTS**
Independent study: choice of the following 15 ECTS (30 CATS) modules or combination of 2 single 7.5 ECTS modules.			
BIOL3034 Laboratory research project	1 & 2	CO*	15
BIOL3061 Field Research Project	1 & 2	CO*	15
BIOL3058 Bioscience Business	1 & 2	CO*	15
BIOL3059 Bioscience Education	1 & 2	CO*	15
BIOL3069 In silico research project	1 & 2	CO*	15
– BIOL3062 Short field project	1	CO*	7.5
– BIOL3032 Literature-based research project	2	CO*	7.5
BIOL3060 Science Communication	1	CO*	7.5
BIOL3066 Extended Science Communication**	2	CO*	7.5
At least FOUR of the following modules			7.5
BIOL3009 Applied Ecology	1	CO	7.5
BIOL3053 Biodiversity & Conservation	1	CO	7.5
BIOL3010 Topics in Ecology & Evolution	2	CO	7.5
BIOL3056 Global Change Biology: Molecules to Ecosystems	2	CO	7.5
BIOL3068 Fluxes, cycles and microbial communities	2	CO	7.5
BIOL3070 Tropical Ecology Field Course	2	CO	7.5
An additional 2 modules may be selected from:			
BIOL3001 Current Topics in Cell Biology	1	O	7.5
BIOL3003 Plant Cell Biology	1	O	7.5
BIOL3006 Cellular & Genetic Aspects of Animal Development	2	O	7.5
BIOL3051 Applied Plant Biology	2	O	7.5
BIOL3057 Biofilms & Microbial Communities	2	O	7.5
BIOL3020 Systems Neuroscience	2	O	7.5
BIOL3021 Cellular & Molecular Neuroscience	1	O	7.5
BIOL3067 Evolution & Development	1	O	7.5
BIOL3013 Molecular Recognition	2	O	7.5
BIOL3014 Molecular Cell Biology	1	O	7.5
BIOL3015 Regulation of Gene Expression	1	O	7.5
BIOL3017 The Molecular & Structural Basis of Disease	2	O	7.5
BIOL3018 Molecular Pharmacology	2	O	7.5
BIOL3052 Biomedical Technology	2	O	7.5
BIOL3022 Cell Signalling in Health and Disease	2	O	7.5
BIOL3025 Neuropharmacology of CNS Disorders	1	O	7.5
BIOL3027 Selective Toxicity	1	O	7.5
BIOL3037 Immunology	1	O	7.5
BIOL3048 Neurodegenerative Disease	2	O	7.5
BIOL3063 Bioinformatics & Systems Biology	1	O	7.5

BIOL3064 Cancer and Chromosome Biology	1	O	7.5
BIOL3065 Biomedical Parasitology	2	O	7.5
Any relevant SOES3XXX, ENVS3XXX or 'Minor' subject modules		O	

CO* A total of 15ECTS need to be taken
**BIOL3060 is an essential prerequisite in order to take BIOL3066,
Revisions of the contents of the programmes for Part 3 are made periodically to reflect developments at the frontiers of biology and ecology.

BSc Ecology 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 mentioned 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 programme follows the University's regulations for **Progression, Determination and Classification of Results: Undergraduate and Integrated Masters Programmes** as set out in the University Calendar (http://www.calendar.soton.ac.uk/).

Those specific to the Faculty, the Academic Unit and your programme are in Section IX – Faculty of Natural and Environmental Sciences, **http://www.calendar.soton.ac.uk/sectionIX/sectIX-index.html.**

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:

Qualification	Minimum overall credit in ECTS credits	Minimum ECTS Credits required at level of award
BSc Ordinary degree	at least 150	30
Diploma of Higher Education	at least 120	45
Certificate of Higher Education	at least 60	45

If you successfully complete Part 1 you may switch to the degree programme in Biology or Zoology.

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.

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.
- 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 Destinations, 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 (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.

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 Programmes Committee OR providing comments to your student representative to feedback 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 students 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 Faculty
- Programme validation, normally every five years.
- External examiners, who produce an annual report
- A national Research Assessment Exercise (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 Education acts on the results of peer observation of teaching and reports from our External Examiners who are selected from comparator universities.

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 2015.

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 (minimum grade B) along with at least one other A-level science subject

A-level Science subjects considered include:

A-level	Biology (minimum grade B)
Other science A-levels	Chemistry Physics Mathematics Psychology Environmental Science Geology Geography

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 Biology can be found on the Biology webpage here - http://www.southampton.ac.uk/undergraduate/courses/biology.shtml

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.

Overall	Reading	Writing	Speaking	Listening
6.5	5.5	5.5	5.5	5.5

Information on all acceptable English Language Tests can be found on the University website: 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.

For further information, please contact our Admissions Team ugafnes@soton.ac.uk

Career Opportunities

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

- Research
- Teaching
- Conservation and the environment
- Agriculture
- Industry
- Journalism

External Examiners(s) for the programme

Name Professor Alex Webb
Institution. University of Cambridge

Name Professor Sebastian Shimeld
Institution. University of Oxford

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 (or other appropriate guide) or online at (give URL).

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/.

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
Approved Calculators		Candidates may use calculators in the examination room only as specified by the University and as permitted by the rubric of individual examination papers. The University approved models are Casio FX-570 and Casio FX-85GT Plus. These may be purchased from any source and no longer need to carry the University logo.
Stationery		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.
Textbooks		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.
Equipment and Materials	Laboratory and Field Equipment and Materials:	All materials required for laboratory or field work are provided. Where necessary, suitable specialist safety equipment will be provided.
IT	Computer Discs or USB drives	Students are expected to provide their own portable data storage device.
	Software Licenses	All software is provided
	Hardware	It is advisable that students provide their own laptop or personal computer, although shared facilities are available across the University campus.
Clothing	Lab Coats and safety	One laboratory coat and a pair of safety

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
	spectacles	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.
	Field course clothing	You will need to wear suitable clothing when attending field courses, e.g. waterproofs, walking boots. You can purchase these from any source.
Printing and Photocopying Costs		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: A4 - 5p per side (black and white) or 25p per side (colour) A3 - 10p per side (black and white) or 50p per side (colour) 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. You can pay for your printing by using the money loaders or by using print copy payment service by going to www.printcopypayments.soton.ac.uk 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 Students entering Year 1 in 2015/16 will be given a printing allowance of £3 per 7.5 ECTS BIOL towards the costs of printing lecture handouts (except BIOL1001 as there is nothing to print out). Practical handouts and module guides will be provided by the university. 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.
Fieldwork: Logistical costs	Accommodation: Insurance (travel/health): Travel Costs: Immunisation/vaccination	For compulsory residential fieldcourses accommodation and travel are normally provided though where necessary, you will be expected to cover the cost of getting to

Main Item	Sub-section	PROGRAMME SPECIFIC COSTS
	costs: Other:	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. For optional fieldcourses, you may be asked to make a contribution to the travel and/or accommodation costs. 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. 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. 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.
Placements (including Industrial Year out)		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.
Parking Costs		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.
Other	**Travel Costs**	Students who opt to undertake a module delivered at Marwell Wildlife will be responsible for their own travel expenses.

Revision History

1. Updated to take account of new Programme Specification template, September 2015
2. Minor Revisions July 2017