



Programme Specification

Biological Sciences {Foundation} [Frenchay]

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Section 1: Key Programme Details

Part A: Programme Information

Programme title: Biological Sciences {Foundation} [Frenchay]

Highest award: BSc (Hons) Biological Sciences

Interim award: BSc Biological Sciences

Interim award: DipHE Biological Sciences

Interim award: CertHE Biological Sciences

Awarding institution: UWE Bristol

Teaching institutions: UWE Bristol

Study abroad: No

Year abroad: No

Sandwich year: Yes

Credit recognition: No

School responsible for the programme: CHSS School of Applied Sciences,
College of Health, Science & Society

Professional, statutory or regulatory bodies: Not applicable

Modes of delivery: Full-time, Sandwich

Entry requirements: For the current entry requirements see the UWE public website.

For implementation from: 01 September 2025

Programme code: C11F00

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: BSc (Hons) Biological Sciences with Foundation Year gives you the opportunity to study life, from molecules through to ecosystems.

Level 3 has been designed to provide a solid underpinning to the BSc (Hons) award, embedding the fundamental biology, chemistry, physics and numeracy skills to allow you to succeed as a biological scientist, no matter your background. Level 3 lecture and practical content is extensively supported by tutorial sessions and emphasises the importance of team work and communication.

At Level 4, the broadly based core curriculum gives you the underpinning theoretical knowledge and practical skills necessary to prepare you for a range of biological disciplines. Level 5 allows you to explore biological sciences from molecular to ecosystem level in greater depth, whilst offering a range of optional modules that allow you to further explore your developing interests. From Level 6, the programme allows you a wealth of choice in the human, molecular and ecological themes of the biological sciences. You will take ownership of your curriculum by choosing to focus in one of these areas, or you can choose from across these themes and keep your options open; the choice is yours.

In keeping with the applied sciences, the course is notably practically focused, with approximately 50% of your teaching delivered as practicals and tutorials at Level 3 and approximately 50% as practical classes across Levels 4 and 5. In addition to subject specific modules, you will study 'Skills for Biosciences' during the Level 4, to equip you with the fundamental scientific skills to succeed as a biological scientist. During Level 5, these are developed in 'Research Skills' where you will develop your skills as an independent scientist and demonstrate your ability to undertake authentic scientific research from project planning through to presentation of your findings. These modules are designed to flow into your independent Research Dissertation Project undertaken during Level 6; an authentic capstone experience where you will demonstrate your skills as a mature, independent scientist.

BSc (Hons) Biological Sciences with Foundation Year is offered as an optional sandwich award, giving you the opportunity to take a placement year in industry if

you choose to. Biological Sciences students who choose this route spend up to 40 weeks undertaking a placement within a local, national or international industrial or academic organisation. Whilst on placement, in addition to gaining key scientific and employability skills, you will complete a module, which contributes to your Level 6 credit requirement.

The optional modules within the programme have been designed to allow you to develop as a biological scientist within the discipline of your choosing. Modules within the molecular, human and ecology themes have been designed to enable outstanding learning, from the fundamental basis of the subject through to the leading edge of contemporary biological sciences. Flexibility is at the heart of the BSc (Hons) Biological Sciences course at UWE. You will have the scope to take ownership of your education and to enable your training as a scientist; to meet the scientific challenges and capitalise on the opportunities you will unlock as a Biological Sciences graduate.

Features of the programme: The BSc. (Hons) Biological Sciences programme has the following key features:

A broadly based core at Level 4 designed to introduce the range of Biological Sciences and to provide students with the requisite knowledge and scientific skills to develop as biological scientists.

A progressively flexible modular structure through Levels 5 and 6 to allow Biological Sciences students to explore their individual interests.

A modular structure clustered into clearly identified themes (human, molecular, ecology) at Levels 4 and 5. Identifying these themes amongst the rich diversity of biological sciences subjects affords students a clear path from entry on to the course through to students' chosen area of employment.

A strong practical provision providing subject specific learning and generic scientific skills to enhance employability through experiential learning (learning by doing).

Dedicated scientific and research skills modules at Levels 4 and 5 designed to empower students to develop into competent, questioning and independent scientists.

An independent research project at Level 6 enabling students to apply the knowledge and skills learned at Levels 4 and 5 through their own independent research.

Educational Aims: The programme aims to enable you to develop:

An appreciation of the complexity and diversity of life processes through the study of organisms, their molecular, cellular and physiological processes, their genetics and evolution, and the interrelationships between them and their environment.

The ability to read and use appropriate literature with a full and critical understanding, while addressing such questions as content, context, aims, objectives, quality of information, and its interpretation and application.

The capacity to give a clear and accurate account of a subject, marshal arguments in a sophisticated way and engage in debate and dialogue both with specialists and non-specialists, using appropriate scientific language.

Critical and analytical skills including a recognition that statements should be tested and that evidence is subject to assessment and critical evaluation.

The ability to employ a variety of methods of study in investigating, recording and analysing material.

The ability to think independently, set tasks and solve problems.

Programme Learning Outcomes:

On successful completion of this programme graduates will achieve the following learning outcomes.

Programme Learning Outcomes

- PO1. Demonstrate competence in a broad range of appropriate qualitative and quantitative practical (laboratory, field or computational) techniques relevant to the course.
- PO2. Demonstrate an awareness of the breadth of the biosciences, from molecular to cellular, and from organism to ecosystem and engage with literature from the Biosciences to develop insight into the subject.
- PO3. The ability to plan, execute and present a piece of independently produced work which includes analysis or evaluation of data within a supported framework, demonstrating some evidence of time management, problem-solving and independence.
- PO4. The ability to access and evaluate bioscience information from a variety of sources and to communicate the principles both orally and in writing in a way that is organised and topical, and recognises the limits of current hypotheses.
- PO5. An appreciation of ethical issues and how they underpin professional integrity and standards, and an awareness of professional standards, including good laboratory practice for data collection, recording and interpretation.
- PO6. The ability to record data accurately, and to carry out basic manipulation of data including qualitative data and statistical analysis, when appropriate.
- PO7. Use appropriate databases computational techniques and tools, to aid further understanding and insight of biological processes.
- PO8. Identify and discuss application of biosciences in solving current and future challenges, including sustainability, and develop professional skills and attributes relevant to a range of potential scientific or other graduate-level employment.

Assessment strategy: Effective learning is achieved by employing a range of assessment approaches, embedded within the compulsory modules and reinforced within the optional modules, that recognise differential approaches to learning. These include opportunities for work-based learning, placements and field work. The development of a flexible, inclusive and accessible curriculum ensures a high quality learning experience for all students. The programme incorporates a range of assessments from continuous online assessment, appropriate for the study of Human Anatomy and Physiology during Level 4 through to log-books written in the

field as part of the Expedition to a Biodiversity Hotspot. Level 3 emphasizes coursework based on problem solving, data interpretation and the development of portfolio skills to provide a solid foundation to degree level study.

Assessments encompassing research reviews, subject-specific reports and data analyses provide you with a valuable learning experience as well as being authentic, focussing on the skills necessary for practicing research scientists. They address learning outcomes PO1, PO2, PO4, PO6 and PO7 derived from the QAA benchmark statements for the Biosciences and are assessments covered collectively by the Level 5 15-credit compulsory modules. Practical portfolios and write-ups with the collection of data, recording of findings and completion of laboratory work and associated reports are fundamental scientific skills, and safe-practice and good conduct a fundamental part of developing an understanding of professional integrity and research ethics (PO5). The compulsory Level 4 and 5 30-credit skills modules provide a structured approach to developing you as an independent scientist capable of planning, organizing and executing independent research and interpreting and communicating the findings (PO3; PO4; PO8). You will be encouraged to communicate science through a variety of media including written work, visual communication through poster design and oral communication through presentation and defence. This scaffolding at the programme level within the Level 4 and 5 skills modules is supported by the optional choices. Where written examinations are used, the emphasis is placed on you updating your knowledge (PO2) and accessing, reviewing and interpreting information (PO7) rather than purely recall and to demonstrate your ability to evaluate information and communicate this in writing in an organized way (PO4). The capstone experience to Level 6 is the independent research project. Whether experimental, desk- or field-based, the assessments have been designed to allow you to demonstrate your developing ability to plan and undertake work as an independent scientist (PO3), to use your skills to produce data (PO1; whether primary or metadata) and to analyse, interpret and communicate this using media (research paper and poster communication). These skills are authentic and relevant to practicing scientists, as well as to other graduate professional roles, enabling graduates to be ready to tackle current and future global challenges (PO8).

Student support: During Level 3, tutorials are more frequent across the modules to engage students in smaller group-based work activities and discussion. Students are supported through their programme by their personal tutor; the tutor supports scaffolded assessment in Level 4 and graduate attributes during Level 5. This is reinforced by the addition of a project supervisor during Level 6.

Part B: Programme Structure

Year 1

Full-time and Sandwich students must take 120 credits from the modules in Year 1.

Year 1 Compulsory Modules (Full-time and Sandwich)

Full-time and Sandwich students must take 120 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
USSKCJ-30-0	Biology in Practice 2025-26	30
USSKCK-30-0	Chemistry in Practice 2025-26	30
USSKCM-30-0	Investigating and Communicating Science 2025-26	30
USSKCL-30-0	Skills for Science 2025-26	30

Year 2

Full-time and Sandwich students must take 120 credits from the modules in Year 2.

Year 2 Compulsory Modules (Full-time and Sandwich)

Full-time and Sandwich students must take 120 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
USSKA4-30-1	Cells, Biochemistry and Genetics 2026-27	30
USSKA3-30-1	Human Anatomy and Physiology 2026-27	30

USSK5C-30-1	Life on Earth 2026-27	30
USSKA6-30-1	Skills for Biosciences 2026-27	30

Year 3

Full-time and Sandwich students must take 120 credits from the modules in Year 3.

Year 3 Compulsory Modules (Full-time and Sandwich)

Full-time and Sandwich students must take 30 credits from the modules in Compulsory Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
USSJQC-15-2	Wildlife Ecology 2027-28	15
USSJSV-15-2	Human Health and Disease 2027-28	15
USSKFQ-15-2	Genetics 2027-28	15
USSKN7-15-2	The Microbial World 2027-28	15
USSKAP-30-2	Research Skills 2027-28	30

Year 3 Optional Modules (Full-time and Sandwich)

Full-time and Sandwich students must take 90 credits from the modules in Optional Modules (Full-time and Sandwich).

Module Code	Module Title	Credit
USSJSW-15-2	Molecular Biotechnology 2027-28	15
USSKB4-15-2	Cell Signalling 2027-28	15
USSJXV-30-2	Human Physiology 2027-28	30
USSKB6-15-2	Microbial Pathogenesis 2027-28	15
USSJQD-15-2	Plant Growth and Survival 2027-28	15

Year 4

Full-time students must take 120 credits from the modules in Year 4.

Sandwich students must take 15 credits from the modules in Year 4. Sandwich students spend a year out working for an organisation, in an appropriate placement to gain relevant work experience. Credit is achieved through the USSK57-15-3 Professional Practice in Applied Sciences module.

Year 4 Compulsory Modules (Full-time)

Full-time students must take 30 credits from the modules in Compulsory Modules (Full-time).

Module Code	Module Title	Credit
USSKBC-30-3	Research Dissertation Project 2028-29	30

Year 4 Compulsory Modules (Sandwich)

Sandwich students must take 15 credits from the modules in Compulsory Modules (Sandwich).

Module Code	Module Title	Credit
USSK57-15-3	Professional Practice in Applied Sciences 2028-29	15

Year 4 Optional Modules (Full-time)

Full-time students must take 90 credits from the modules in Optional Modules (Full-time).

Module Code	Module Title	Credit
USSJXY-15-3	Developmental and Stem Cell Science 2028-29	15
USSKN9-15-3	Environmental Microbiology 2028-29	15
USSKBF-30-3	Genomic Technologies 2028-29	30
USSKN6-15-3	Global Forest Systems 2028-29	15
USSK55-15-3	Marine Ecosystems 2028-29	15

USSKBH-30-3	Medical Genetics 2028-29	30
USSKBJ-30-3	Medical Microbiology 2028-29	30
USSKCA-15-3	Neuroscience and Neuropharmacology 2028-29	15
USSKBW-15-3	Pathophysiology 2028-29	15
USSJXW-15-3	Physical Activity, Nutrition and Health 2028-29	15
USSK56-15-3	Primate Ecology and Conservation 2028-29	15
USSKCE-15-3	Science Communication 2028-29	15
USSKNB-15-3	Sustainable Food Production 2028-29	15
USSK59-15-3	Expedition to a Biodiversity Hotspot 2028-29	15

Year 5

Sandwich students must take 105 credits from the modules in Year 4.

Year 5 Compulsory Modules (Sandwich)

Sandwich students must take 30 credits from the modules in Compulsory Modules (Sandwich).

Module Code	Module Title	Credit
USSKBC-30-3	Research Dissertation Project 2029-30	30

Year 5 Optional Modules (Sandwich)

Sandwich students must take 75 credits from the modules in Optional Modules (Sandwich).

Module Code	Module Title	Credit
USSJXY-15-3	Developmental and Stem Cell Science 2029-30	15
USSKN9-15-3	Environmental Microbiology 2029-30	15

USSKBF-30-3	Genomic Technologies 2029-30	30
USSKN6-15-3	Global Forest Systems 2029-30	15
USSK55-15-3	Marine Ecosystems 2029-30	15
USSKBH-30-3	Medical Genetics 2029-30	30
USSKBJ-30-3	Medical Microbiology 2029-30	30
USSKCA-15-3	Neuroscience and Neuropharmacology 2029-30	15
USSKBW-15-3	Pathophysiology 2029-30	15
USSJXW-15-3	Physical Activity, Nutrition and Health 2029- 30	15
USSK56-15-3	Primate Ecology and Conservation 2029-30	15
USSKCE-15-3	Science Communication 2029-30	15
USSKNB-15-3	Sustainable Food Production 2029-30	15
USSK59-15-3	Expedition to a Biodiversity Hotspot 2029- 30	15

Part C: Higher Education Achievement Record (HEAR) Synopsis

The Biological Sciences programme has been designed to deliver a broadly based core encompassing the processes and mechanisms of life, from molecules to ecosystems. Graduates will have an understanding of the complexity and diversity of life through study of the molecular, cellular and physiological processes of organisms, how organisms interrelate and relate to the environment in addition to an understanding of hypothesis-driven scientific process. Graduates will be equipped with laboratory and analytical skills and the ability to engage in debate and dialogue with specialists and non-specialists and will have developed the ability to think independently, set tasks and solve problems.

Part D: External Reference Points and Benchmarks

The programme has been designed within the framework of the QAA Subject Benchmark Statements: Biosciences (2023). This has not constrained the development of the programme, but has provided relevant context to review the programme offer. Where modules are co-taught with BSc (Hons) Biomedical Science, on-campus invigilated assessments are mandated by the Institute of Biomedical Science (Cells, Biochemistry and Genetics [Level 4], Medical Microbiology [Level 6], Medical Genetics [Level 6]).

Part E: Regulations

Approved to University Regulations and Procedures.

It is the Award Board's responsibility to determine whether the student's attainment at FHEQ level 3 is sufficient to progress to level 4.