

SECTION 1: KEY PROGRAMME DETAILS

This section provides students with key details about their programme.

| PROGRAMME INFORMATIO | N |
|--|---|
| Final Award Title | MSci Biological Sciences with Foundation Year |
| Default Award Title | None |
| (Exit Award) | |
| Interim Award Titles | BSc (Hons) Biological Sciences |
| (Exit Awards) | BSc Biological Sciences Diploma of Higher Education: Biological Sciences Certificate of Higher Education: Biological Sciences |
| Awarding Institution | UWE Bristol |
| Teaching Institutions | Bristol Zoological Society |
| Partner Institutions | N/A |
| Delivery Locations | University of the West of England, Bristol: Frenchay Campus Bristol Zoological Society: Bristol Zoo Gardens |
| Study Abroad / Exchange / Credit Recognition | Indicate whether this programme is part of a Study abroad / Exchange / Credit recognition arrangement by stating which applies. |
| Faculty Responsible For Programme | Faculty of Health and Applied Sciences |
| Department Responsible For Programme | Department of Applied Sciences |
| Professional Statutory or Regulatory Body (PSRB) Links | N/A |
| Apprenticeship | N/A |
| Mode of Delivery | FT attendance; there is a sandwich route. |
| Entry Requirements | The University's Standard Entry Requirements apply. Tariff points as appropriate for the year of entry - up to date requirements are available through the courses database. |

| PROGRAMME INFORMATION | | | | | | |
|-------------------------|----------------|--|--|--|--|--|
| For Implementation From | September 2020 | | | | | |
| Programme Codes | C11D | | | | | |

| PART B: FOR STUDENT AND | ACADEMIC SERVICES COMPLETION ONLY |
|--|-----------------------------------|
| First UVP Approval Date | 31/05/2016 |
| Date of Last Revalidation (through Programme Enhancement Review) | 06/11/2019 |
| Next Programme Enhancement Review Date | 2025 |

SECTION 2: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

This section provides students with an overview of the programme, its aims and its learning outcomes. It sets out what prospective and registered students can expect to know, understand and be able to do on successful completion of the programme.

Please write this section in the first person, addressing your prospective students.

PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

1. (Programme) Overview (c. 400 words)

MSci Biological Sciences with Foundation Year gives you the opportunity to study life, from molecules through to ecosystems. The programme has been designed with a broadly based core in the first year of study to allow you to identify the areas within the biological sciences, which truly interest you. From second year and into final year, 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.

The foundation year 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. The foundation year is heavily supported by tutorial sessions and emphasises the importance of team work and communication. In keeping with the applied sciences, the course is heavily practically focused, with approximately 50% of your teaching delivered as practical classes across the first two years of the Honours programme. In addition to subject specific modules, you will 'Study Skills for Biosciences' during the first year, to equip you with the fundamental scientific skills to succeed as a biological scientist. During second year, 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 project undertaken during the third year of study; an authentic capstone experience where you will demonstrate your skills as a mature, independent scientist. You will develop further as a researcher during the M year, undertaking an indepdent research project of twice the scope, and learning how to be an effective research planner and communicator, while learning about the leading-edge of biological sciences research.

MSci 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 in a research and development environment. Whilst on placement, in addition to gaining key scientific and employability skills, you will complete a module, which contributes to your final year 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.

2. Educational Aims (c. 4-6 aims)

PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

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.

3. Programme Learning Outcomes (c. 6-8 outcomes)

| No. | PO Text |
|-----|---|
| PO1 | Experience and competence in a broad range of appropriate practical techniques and skills relevant to the biosciences including data collection, analysis and interpretation of those data, and testing of hypotheses and the ability to place the work in context and to suggest lines of further investigation. |
| PO2 | The ability to update your knowledge of the biosciences and explain biological phenomena at a variety of levels (from molecular to ecological systems) and how evolutionary theory is relevant to your area of study. |
| PO3 | The ability to plan, execute and present a piece of hypothesis-driven work within a supported framework in which qualities such as time management, problem solving, and independence are evident. |
| 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 | Access bioscience databases and use appropriate selection criteria to mine, manipulate and interpret data. |
| PO8 | An understanding of the use of bioinformatics approaches in the analysis of large Datasets. |

| 4. Program | mme (Learniı | ng) Outcomes | (POs) Mappin | g |
|----------------|--|--|---|---|
| Programme | Module No: USSKCJ-30-0 Biology in Practice | Module No: USSKCK-30-0 Chemistry in Practice | Module No: USSKCL-30-0 Skills for Science | Module No: USSKCM-30-0 People and Science |
| Outcomes: PO1: | Modi | Modt | Моді | Modi |
| PO2 | | | | |
| PO3: | | | | |
| PO4: | | | | |
| PO5: | | | | |
| PO6: | | | | |
| PO7: | | | | |
| PO8: | | | | |

| Programme Outcomes: | Module No: USSK5C-30-1 Life on Earth | Module No: USSKA3-30-1 Human Anatomy and Physiology | Module No: USSKA4-30-1 Cells, Biochemistry and Genetics | Module No: USSKA6-30-1 Skills for Biosciences | Module No: USSKAP-30-2 Research Skills | Module No: USSKAQ-30-2 Microbial Life | Module No: USSKAM-30-2 Molecular Biotechnology | Module No: USSXXX-15-2 Genetics | Module No: USSKB4-15-2 Cell Signalling | Module No: USSKAN-30-2 Human Health and Disease | Module No: USSJXV-30-2 Human Physiology | Module No: USSK5F-30-2 Ecology and Ecosystem Protection | Module No: USSK5H-30-2 Wildlife Ecology | Module No: USSK5K-30-3 Research Experimental Project OR USSKBC-30-3 Research Dissertation Project | Module No: USSKCF-15-3 Scientific Frontiers and Enterprise | Module No: USSK57-15-3 Professional Practice in Applied Science | Module No: USSKCE-15-3 Science Communication | Module No: USSKBF-30-3 Genomic Technologies | Module No: USSKBH-30-3 Medical Genetics | Module No: USSXXX-15-3 Cell Control and Disease | Module No: USSKCG-15-3 Molecular Medicine | Module No: USSKBJ-30-3 Medical Microbiology | Module No: USSKCA-15-3 Neuroscience and Neuropharmacology | Module No: USSJXW-15-3 Physical Activity, Nutrition and Health | Module No: USSKBW-15-3 Pathophysiology | Module No: USSJXY-15-3 Developmental and Stem Cell Science | Module No: USSK56-15-3 Primate Ecology and Conservation | Module No: USSK55-15-3 Marine Ecosystems | Module No: USSKCD-15-3 Environmental Forensics | Module No: USSKN6-15-3 Global Forest Systems | Module No: USSK59-15-3 Tropical Expedition | Module No: USSKN9-15-3 Environmental Microbiology |
|------------------------|--------------------------------------|---|---|---|--|---------------------------------------|--|---------------------------------|--|---|---|---|---|--|--|---|--|---|---|---|---|---|---|--|--|--|---|--|--|--|--|---|
| PO1: | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | ΣĞ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ | Ĕ |
| PO2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO3: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO4: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O5: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O6: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 07: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO8: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 4. Progra | mme (Learniı | ng) Outcomes | (POs) Mappin |
|------------------------|---|---|---|
| | | | |
| | h Impact | ractice | y Biology |
| | Module No: USSKM5-30-M Research with Impact | Module No: USSKM6-60-M Research in Practice | Module No: USSKM4-30-M Contemporary Biology |
| |): USSKM5-30-I |): USSKM6-60- |): USSKM4-30-I |
| Programme Outcomes: | Module No | Module No | Module No |
| PO1: | | | |
| PO2 | | | |
| PO3: PO4: | | | |
| PO4. | | | |
| PO6: | | | |
| PO7: | | | |
| PO8: | | | |

PART B: PROGRAMME STRUCTURE

1. Structure (Full-time)

This structure diagram demonstrates the student journey from entry through to Graduation for a typical **full time student** including:

- level and credit requirements
- interim award titles compulsory and optional modules

Year: Foundation

Compulsory modules

| Module Code | Module Title | Level | Credit |
|-------------|-----------------------|-------|--------|
| USSKCK-30-0 | Chemistry in Practice | 3 | 30 |
| USSKCM-30-0 | People and Science | 3 | 30 |
| USSKCL-30-0 | Skills for Science | 3 | 30 |
| USSKCJ-30-0 | Biology in Practice | 3 | 30 |

Year: 1

Interim award: CertHE Biological Sciences; requires 120 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

| Module Code | Module Title | Level | Credit |
|-------------|----------------------------------|-------|--------|
| USSK5C-30-1 | Life on Earth | 4 | 30 |
| USSKA3-30-1 | Human Anatomy and Physiology | 4 | 30 |
| USSKA4-30-1 | Cells, Biochemistry and Genetics | 4 | 30 |
| USSKA6-30-1 | Skills for Biosciences | 4 | 30 |

Year: 2

Interim award: DipHE Biological Sciences; requires 240 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

| Module Code | Module Title | Level | Credit |
|-------------|-----------------|-------|--------|
| USSKAP-30-2 | Research Skills | 5 | 30 |

Optional modules

The student must choose 90 credits from the optional modules

| Module Code | Module title | Level | Credit |
|-------------|----------------------------------|-------|--------|
| USSKAQ-30-2 | Microbial Life | 5 | 30 |
| USSXXX-15-2 | Genetics | 5 | 15 |
| USSKB4-15-2 | Cell Signalling | 5 | 15 |
| USSKAM-30-2 | Molecular Biotechnology | 5 | 30 |
| USSKAN-30-2 | Human Health and Disease | 5 | 30 |
| USSJXV-30-2 | Human Physiology | 5 | 30 |
| USSK5F-30-2 | Ecology and Ecosystem Protection | 5 | 30 |
| USSK5H-30-2 | Wildlife Ecology | 5 | 30 |

Year: Optional Placement Year

Interim award: DipHE Biological Sciences; requires 240 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

| Module Code | Module title | Level | Credit |
|-------------|--|-------|--------|
| USSK57-15-3 | Professional Practice in Applied Science | 6 | 15 |

Year: 3

Interim award: BSc Biological Sciences; requires 300 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

| Module Code | Module Title | Level | Credit | | | |
|-------------|-------------------------------|-------|--------|--|--|--|
| USSK5K-30-3 | Research Experimental Project | 6 | 30 | | | |
| OR | | | | | | |
| USSKBC-30-3 | Research Dissertation Project | 6 | 30 | | | |
| | | | | | | |

Optional modules

The student must choose 90 credits from the optional modules

| Module Code | Module title | Level | Credit |
|-------------|---|-------|--------|
| USSKCF-15-3 | Scientific Frontiers and Enterprise | 6 | 15 |
| USSKCE-15-3 | Science Communication | 6 | 15 |
| USSKBF-30-3 | Genomic Technologies | 6 | 30 |
| USSKBH-30-3 | Medical Genetics | 6 | 30 |
| USSXXX-15-3 | Cell Control and Disease | 6 | 15 |
| USSKCG-15-3 | Molecular Medicine | 6 | 15 |
| USSKBJ-30-3 | Medical Microbiology | 6 | 30 |
| USSKCA-15-3 | Neuroscience and Neuropharmacology | 6 | 15 |
| USSJXW-15-3 | Physical Activity, Nutrition and Health | 6 | 15 |
| USSKBW-15-3 | Pathophysiology | 6 | 15 |
| USSJXY-15-3 | Developmental and Stem Cell Biology | 6 | 15 |
| USSK56-15-3 | Primate Ecology and Conservation | 6 | 15 |
| USSK55-15-3 | Marine Ecosystems | 6 | 15 |
| USSKCD-15-3 | Environmental Forensics | 6 | 15 |
| USSKN6-15-3 | Global Forest Systems | 6 | 15 |
| USSK59-15-3 | Tropical Expedition | 6 | 15 |
| USSKN9-15-3 | Environmental Forensics | 6 | 15 |
| USSKNB-15-3 | Sustainable Food Production | 6 | 15 |

Year: M

Interim award: BSc (Hons) Biological Sciences with Foundation year requires 480 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

| Module Code | Module Title | Level | Credit |
|-------------|----------------------|-------|--------|
| USSKM5-30-M | Research with Impact | М | 30 |
| USSKM6-60-M | Research in Practice | М | 60 |

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 interpedently, 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 (2015). This has not constrained the development of the programme, but has provided relevant context to re-examine the compulsory and optional modules. The graduate attributes articulated within the QAA Benchmark Statements: Biosciences (2015) were circulated to module leaders when considering assessment strategy in addition to a list of skills sought by employers circulated by the The Royal Society of Biology.

PART E: REGULATIONS

A: 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.