

# SECTION 1: KEY PROGRAMME DETAILS

This section provides students with key details about their programme.

PROGRAMME INFORMATIO	N
Final Award Title	BSc (Hons) Biological Sciences with Foundation Year
Default Award Title	None
(Exit Award)	
Interim Award Titles	BSc Biological Sciences Diploma of Higher Education: Biological Sciences
(Exit Awards)	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 <u>courses database</u> .
For Implementation From	September 2020

PROGRAMME INFORMATIO	N
Programme Codes	C110

PART B: FOR STUDENT AND ACADEMIC SERVICES COMPLETION ONLY							
First UVP Approval Date	19 November 2015						
Date of Last Revalidation (through Programme Enhancement Review)	6 November 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)

BSc (Hons) 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 final year of study; 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 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. Progra	mme (Learnir	ng) Outcomes	(POs) Mappin	g	
Programme Outcomes:	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	
PO1: PO2					
PO2 PO3:					
PO4:					
PO5:					
PO6:					
P07:					
PO8:					

4. Prog	ram	me	: (Le	earr	ning	<b>J) O</b>	)utc	com	es (	(PO	s) I	Мар	pin	g	-	Ŧ					T												
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	Module No: USSKNB-15-3 Sustainable Food Production
PO1:																																	
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# 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**

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

# 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

# PART C: HIGHER EDUCATION ACHIEVEMENT RECORD (HEAR) SYNOPSIS

dialogue with specialists and non-specialists and will have developed the ability to think indepdently, 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.