



University of the
West of England

CORPORATE AND ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data		
Awarding Institution	UWE	
Teaching Institution	UWE	
Delivery Location	UWE	
Faculty responsible for programme	Faculty of Health and Applied Sciences	
Department responsible for programme	Department of Biological, Biomedical and Analytical Sciences.	
Modular Scheme Title	Foundation Science Year (FSY)	
Professional Statutory or Regulatory Body Links	None.	
Highest Award Title	Pass Science Foundation Year	
Default Award Title	None	
Fall-back Award Title	None	
Interim Award Titles	None	
UWE Progression Route	BSc Programmes in Faculty of Health and Applied Sciences	
Mode(s) of Delivery	FT	
Codes	UCAS: BCF0	JACS:
	ISIS: Y120	HESA:
Relevant QAA Subject Benchmark Statements	None	
CAP Approval Date	29 th May 2014	
Valid from	September 2002	
Valid until Date	September 2014	
Version	VERSION 3	

Part 2: Educational Aims of the Programme

The Science Foundation Year facilitates access to HE, and moreover prepares learners to be successful undergraduates across a suite of BSc(Hons) Programmes offered by the Faculty of Health and Applied Sciences. This suite of Programmes includes, but is not necessarily limited to:

- Biological Sciences
- Biomedical Sciences
- Healthcare Science (Life Sciences)
- Healthcare Science (Physiological Sciences)
- Forensic Science
- Environmental Science
- Wildlife Ecology and Conservation Science
- Psychology
- Psychology with Sociology, or Criminology, or Law.

The Foundation teaching team is composed of academics from across this suite of Programmes, and aims to create a friendly and supportive atmosphere that will facilitate individual learners develop the key foundation skills upon which they can develop their future careers here at UWE – and occasionally elsewhere - and engage in ongoing social and educational development.

To this end a programme has been designed which will enable students to:

- prepare for success as scientists by studying the breadth and relevance of the natural and social sciences, encountering the multivariate contexts in which they will encounter the core concepts of mathematics, physics, biology, chemistry, and IT.
- be confident in the theory and practical application of a wide range of approaches and methodologies for experimental and data analysis relevant to the natural and social sciences.
- be ready and able to contribute positively as undergraduates having become acquainted with key group-working and learner skills.
- be lifelong, reflective learners who understand the roles and responsibilities of scientists in society.
- engage in constructive, critical analysis.

In addition to this, the introduction of the “Evotec Prize for Scientific Excellence” in 2013 promotes achievement and inspires success.

Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

Successful students from the Foundation Science programme will have a strong grounding in biology, chemistry, mathematics and physics, along with the core concepts of Psychology. They will also understand the place of a scientist in society, appreciating the importance of communication skills and the focus upon functional team working as the keystone of successful scientific endeavor.

Successful students from the Foundation Science programme will have acquired excellent analytical, communication and time management skills. They will also have acquired experience in the qualitative and quantitative interpretation of scientific results and numerical data, a vital part of the scientific approach.

Part 3: Learning Outcomes of the Programme

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

The learning outcomes for the Programme have not changed as a result of the refresh. However, as the learning outcomes for the pre-refreshed Programme were succinctly expressed, good practice dictates that they are now expressed in more detail, and mapped at a modular level.

Learning Outcomes:	USSKCJ-30-0 Biology in Practice	USSKCK-30-0 Chemistry in Practice	USSKCL-30-0 Skills for Science	USSKCM-30-0 People and Science
A) Knowledge and understanding of:				
Structure and function of the natural world.	X	X	X	X
The techniques used to gather and critically analyse data in the natural sciences.	X	X	X	X
The techniques used to gather and critically analyse data in the social sciences.				X
Terminology, nomenclature, taxonomy and classification.	X	X	X	
Wider aspects of the context of science and the scientist in society.	X	X		X
Methodology of scientific inquiry and research.	X	X	X	X
Physics, IT and mathematics as tools for understanding physical processes.			X	X
Principles of genetics, physiology, and biological energetics.	X			X
The facts, principles, practices and applications of organic, inorganic and physical chemistry.		X	X	
The explanation of biological phenomena at a variety of levels from biological molecules to whole organisms.	X			X
Key theoretical perspectives in Psychology.				X
Fundamental laboratory techniques.	X	X		
(B) Intellectual Skills				
Using theories and paradigms.	X	X	X	X
Analyze, synthesize, and summarize information.	X	X	X	X

Part 3: Learning Outcomes of the Programme

Collect evidence, test hypotheses.	X	X	X	X
Apply knowledge to problems	X	X	X	X
Independent learning, self-manager	X	X	X	X
Appreciate moral, ethical issues around investigation				X
(C) Subject/Professional/Practical Skills				
Plan, conduct report on investigation	X	X	X	X
Collect, record, analyse data.	X	X	X	X
Undertake lab investigations.	X	X		X
Use of technology for analyzing data.			X	X
Undertake scientific case study.			X	X
Reference work and compare to others.	X	X	X	X
(D) Transferable skills and other attributes				
Evaluate own academic performance and plan work accordingly.	X	X	X	X
Study independently in a variety of learning styles.	X	X	X	X
Work effectively as a team member.	X	X	X	X
Practise good time management, prioritise workloads and recognise deadlines.	X	X	X	X
Communicate effectively in a variety of media and contexts; in particular, express the interpretation of results in a manner comprehensible to the intended recipient and write comprehensive, comprehensible, rational and impartial reports.			X	X
Use mathematical and statistical methods effectively in problem solving.			X	X
Use a variety of IT skills for data processing, communicating and supporting scientific research.			X	X

Part 4: Student Learning and Student Support**Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated**

The programme team aim to provide an outstanding learning experience for all students. Learners are supported from induction to completion of their Foundation Year and beyond. Right from induction students meet key staff who will support them on their learning journey including Academic Personal Tutors, the programme manager and staff from library, careers, student support and IT services. Physical and electronic resources provide important details on

Part 4: Student Learning and Student Support

the programme content and assessment and give detail of the support systems available to help students achieve their potential.

For students with individual support needs consultation with the individual and Disability Services happens from application onwards. All students are advised in induction on obtaining reasonable adjustments for disabilities, maternity or paternity periods from Disability Services.

Various initiatives are in place to support students in making the choice of future Programme that is right for them. Early in the academic year, incumbent Programme managers are invited to a “Career Circus” in which they market their own Programme to Foundation Science students. There is a lively Q&A session and students are encouraged to approach members of the team to answer any further questions. Throughout the year Foundation students are taught by members of their prospective teaching team, who contextualize material in the terms of undergraduate Programmes.

All students are allocated a personal tutor in their first week of study to act as an initial point of contact/ ‘friendly face’. The focus of the personal tutor at level 0 is to help tutees to settle in to the university, and assist in guiding them to further study – ordinarily at UWE but occasionally beyond. All students are encouraged to make regular 1-2-1 appointments with their tutor to discuss progression and any issues arising.

At UWE, Bristol there is a policy for a minimum average requirement of 12-hours/week contact time over the course of both Foundation and undergraduate programmes. This contact time encompasses a range of face-to-face activities as described below. In addition a range of other learning activities will be embedded within the programme, which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

On Foundation Science teaching is a mix of scheduled and independent learning. Skills for independent and lifelong learning are incorporated into the modules **Skills for Science** and **People and Science**.

Scheduled learning includes lectures, practical classes, subject specific tutorials, academic support tutorials, science case-study project supervision and workshops.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion and wiki-facilitated group working.

The major development over the last few years and one that is certainly set to continue over the next five years and beyond is the development of technology enhanced learning in many of its forms. The team continues to develop resources (which includes online video tutorials) on the UWE VLE, Blackboard. Staff are also planning to record lectures and post them as part of the module resources on Blackboard.

Perhaps the greatest changes have been seen in assessment. The following lists some of the developments:

Part 5: Assessment

A: Approved to [University Regulations and Procedures](#)

Part 5: Assessment**Assessment Strategy**

Assessment strategy to enable the learning outcomes to be achieved and demonstrated:

Assessments throughout the programme enable students to acquire the necessary knowledge, understanding and skills outlined in the learning outcomes of the programme.

An “assessment for learning” strategy has been adopted, where assessment is used as a tool to enable students to reach learning outcomes, which they have not yet met. This often takes the form of formative and summative assessments which explicitly feed forward into future assignments. Tasks are built upon, and the assessment journey is made clear to students through guidance documentation.

Considerable emphasis is given to the assessment of learning undertaken in the practical laboratory, as well as critical evaluation, and communication in a range of formats including in-session presentation of scientific case-studies.

Typically at level zero the coursework contributes 60% of the module mark and assessment under controlled conditions – which may include traditional examinations - 40%.

Assessment Map

The programme encompasses a range of **assessment methods** which are detailed in the following assessment map.

Assessment Map for Science Foundation Year

		Assessment Type					
		Unseen Written Exam	Skills Portfolio	Report based on practical work	Data analysis/Interpretation/ problem solving exercise/case study	Critical review/ poster presentation	Essay
Compulsory Modules Level 0	USSKCJ-30-0 Biology in Practice	A (40)		B (30)			B (30)
	USSKCK-30-0 Chemistry in Practice	A (40)			B (60)		
	USSKCL-30-0 Skills for Science	A (30)	A (10)		B (60)		
	USSKCM-30-0 People and Science	A (40)			B (30)	B (30)	

Part 6: Programme Structure

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 requirements module diet, including compulsory and optional modules

ENTRY		Compulsory Modules	Optional Modules	Interim Awards
Year 0		USSKCJ-30-0 Biology in Practice	None	None
		USSKCK-30-0 Chemistry in Practice		
		USSKCL-30-0 Skills for Science		
		USSKCM-30-0 People and Science		

Part 7: Entry Requirements

The University’s Standard Entry Requirements apply with the following additions/exceptions:
 120 UCAS Tariff Points for the year of entry (refer to the UWE website) taking as a base entry point GCSE grade C in Mathematics and in Sciences. There is an expectation that prospective students will have studied science beyond GCSE, however non-standard applicants are considered on a case by case basis by the programme manager.

Part 8: Reference Points and Benchmarks

- **University’s Mission Statement**

The programme has been refreshed to align fully with the UWE Bristol Strategy 2020. Examples are given in this document of good practice in teaching and learning, and techniques to prepare graduates for employment or further study.

- **University’s teaching and learning policies**

In line with the University’s teaching and learning policies, this programme takes a student centred approach to learning by allowing students to take control of aspects of their learning, and providing a learning environment that stimulates active participation and engagement in the learning process. The programme seeks to create an environment that will stimulate students to

Part 8: Reference Points and Benchmarks

take responsibility for aspects of their learning, while lecturers take responsibility for facilitating that learning. Module learning outcomes have been designed to ensure that students meet the overall programme learning outcomes on completion of the programme.

A variety of assessment methods are incorporated within the programme to cater for a diversity of student strengths and abilities. Although this document focuses on summative assessment, the course team recognises the importance of both summative and formative assessment activity as an integral part of the learning and teaching process. All assessments will comply with the University Assessment Policy and Academic Regulations.

What methods have been used in the development of this programme to evaluate and improve the quality and standards of learning? This could include consideration of stakeholder feedback from, for example current students, graduates and employers.

Programme Managers from the Biological, Biomedical, Forensic, Environmental, Wildlife Ecology & Conservation Sciences, along with Psychology, agree that FSY students are well prepared for success on their Programmes, noting many examples of outstanding success.

FSY alumni appear to be particularly well prepared for success at L1 having adjusted to the HE culture and systems. They appear to be better prepared – emotionally and in terms of their external stability – for the adjustment to HE, engaging confidently in student representation.

Success appears to be underpinned by the fact that the FSY provides a firm grounding across the sciences, which is then taught by academics who design and deliver the destination Programmes; as one PM commented “we have taken the golden parts of A-level into FSY – ensuring that everything needed for success is included”.

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 he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in module specifications, available on the [University's website](#).