



University of the  
West of England

### PROGRAMME SPECIFICATION

Part 1: Information	
<b>Awarding Institution</b>	University of the West of England, Bristol
<b>Teaching Institution</b>	University of the West of England, Bristol
<b>Delivery Location</b>	Frenchay Campus
<b>Study abroad / Exchange / Credit recognition</b>	N/A
<b>Faculty responsible for programme</b>	Health and Applied Sciences
<b>Department responsible for programme</b>	Applied Sciences
<b>Professional Statutory or Regulatory Body Links</b>	<ul style="list-style-type: none"> <li>• National School of Healthcare Science</li> <li>• Registration Council for Clinical Physiologists</li> </ul>
<b>Highest Award Title</b>	BSc (Hons) Healthcare Science (Physiological Sciences)  Pathways: <ul style="list-style-type: none"> <li>• BSc (Hons) Healthcare Science (Cardiac Physiology)</li> <li>• BSc (Hons) Healthcare Science (Respiratory &amp; Sleep Physiology)</li> <li>• BSc (Hons) Healthcare Science (Neurophysiology)</li> </ul>
<b>Default Award Title</b>	
<b>Interim Award Titles</b>	BSc Healthcare Science Dip HE Healthcare Science Cert HE Healthcare Science
<b>UWE Progression Route</b>	N/A
<b>Mode of Delivery</b>	FT (distance learning) / PT (distance learning) / DA (degree apprenticeship)
<b>ISIS code/s</b>	C991
<b>For implementation from</b>	September 2017

**Part 2: Description**

The BSc (Hons) Healthcare Science (Physiological Sciences) programme is part of the University's extensive Healthcare Science provision to provide the principle training route for Healthcare Science Practitioners. This exciting course is delivered through a unique collaboration between the University of the West of England and local NHS providers within the South-West region, and has been developed in direct response to the Modernising Scientific Careers programme at the Department of Health. This has been established to develop a common career pathway, education and training standards for Healthcare Scientists (described as a **Practitioner Training Programme** or **PTP**), with professional specialisms in:

- [Cardiac Physiology](#)
- [Respiratory & Sleep Physiology](#)
- [Neurophysiology](#)

as defined by Health Education England.

The degree programme enables students to develop the knowledge and skills required of a healthcare scientist whilst also completing the extensive work-based training that forms an integral and significant proportion of a three year course, and to demonstrate specified standards of practice.

The programme provides:

- A broad knowledge base in healthcare sciences, including the application of physics to physiological measurement, with specific areas of deeper understanding relevant to the specialist physiological pathways.
- The opportunity to develop specialist skills and knowledge in one of the unique
  - Cardiac Physiology,
  - Respiratory & Sleep Physiology, or
  - Neurophysiology
 pathways within physiological sciences through targeted work experience in healthcare science laboratories, and via the development of specialist knowledge within the final year of study.
- **Practical experience of working in a clinical environment through either**
  - i. an experiential **placement** within the first year to introduce Healthcare Science, and in extended placements in years 2 and 3; **or**
  - ii. via the student's pre-existing (and throughout the course) **in-post employment** in an appropriate role within a physiological sciences department (where this accredited course is an essential professional requirement for career progression to become a Healthcare Science Practitioner)
 enabling the student to perform a wide range of relevant techniques and to undertake a project out in the work place.
- An understanding of the importance of effective communication, patient-centered care, evidence-based practice, clinical audit and multidisciplinary team working.
- The underpinning knowledge to enable students to gain the accompanying skills and attitudes to work as a Physiological Scientist.
- The opportunity for students to develop the skills to reflect and review their own practice (both academically and professionally) and strive to improve personal performance.
- A unique opportunity for students to develop specialist knowledge and skills within pathways specifically designed (and professionally required) for the pursuance of a career as a Healthcare Scientist in the NHS.

The programme offers a combination of modules enabling students to understand the science of the physiology and pathophysiology of relevant body systems and the application of technology, while working at the cutting edge within the workplace during the programme (for students both in-post and on placement) and beyond into their future careers.

The in-post stream of Physiological Sciences is aligned to the employer led Education and Skills Funding Agency [Level 6 Healthcare Science Practitioner Degree Apprenticeship Standard](#).

<b>Part 2: Description</b>
<b>Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)</b>
<p>The programme is a professionally accredited course that integrates theoretical and clinical approaches to understanding the human body in health and disease. It provides a foundation in core bioscience subjects that builds to a choice of physiology specialisms – cardiac physiology, respiratory and sleep physiology or neurophysiology – at advanced levels. These subjects are supported by clinical investigation to develop proficiency in physiological measurement, diagnosis and clinical problem solving. At the heart of the programme is work-based experience in physiology departments (predominantly within the NHS but also the private sector) to provide professional training encompassing patient-centered care and multidisciplinary team working. Students will be expected to adhere to professional body codes of conduct throughout the programme, and demonstrate attendance at all taught and workplace activities.</p>
<b>Regulations</b>
<p>A: Approved to <a href="#">University Regulations and Procedures</a></p> <p>No modules can be considered for condonation.</p> <p>Aegrotat awards will not give eligibility for NSHCS accreditation.</p>



<b>(B) Intellectual Skills</b>																
Actively question and seek relevant information.		x			x						x	x	x	x	x	x
Compare and contrast information from different sources online and offline.	x		x	x							x	x	x	x	x	
Critically evaluate information against hypotheses in a range of research scenarios.						x	x				x	x	x	x	x	
Actively analyse and apply problem-solving strategies.						x	x				x	x	x	x	x	
Demonstrate independent self-directed learning, and skills for life-long learning.										x	x	x	x	x	x	x
<b>(C) Subject/Professional/Practical Skills</b>																
Understand the importance of patient-centred care, evidence based practice, clinical audit and multidisciplinary working.											x				x	x
Critically observe, analyse and evaluate information arising from a wide range of sources.											x	x	x	x	x	x
Apply practical approaches to the study of selective aspects of healthcare science and demonstrate an awareness of safety and good workplace practice.	x	x	x	x	x	x	x				x	x	x	x	x	x
Communicate effectively scientific data and concepts using a range of communication strategies.	x	x	x	x	x	x	x				x	x	x	x	x	x
Develop discipline-specific interests by specialising within the programme in relation to subject and/or career aspirations.						x	x				x	x	x	x	x	x
Obtain, record, collate and critically analyse data using appropriate practical techniques, working as an individual or within a group.	x		x	x	x	x	x				x	x	x	x	x	
Demonstrate an understanding of the research process, including the current ethical and legal frameworks within which human and animal research can be conducted in the UK, through the execution of a research project.						x									x	x
<b>(D) Transferable skills and other attributes</b>																
Communicate information, advice, instruction and professional opinion to colleagues, patients, clients, users, their relatives and carers.											x				x	x
Critically analyse data arising from various means of biological or work-based inquiry.						x	x				x	x	x	x	x	x
Undertake active learning and development.															x	x
Apply information management skills to their learning and practice.	x	x	x	x	x	x	x				x	x	x	x	x	x
Work effectively as a team member.	x	x	x	x		x	x				x	x	x	x	x	x
Demonstrate an autonomous and reflective approach to lifelong learning.						x	x				x	x	x	x	x	x

Part 3: Learning Outcomes of the Programme															
<b>IN-POST</b> <i>Learning Outcomes:</i>	USSKL6-30-1 Scientific Basis of Life	USSJT6-30-1 Principles in Healthcare Sci.	USSKA9-30-1 Introduction to Physiological Sci.	USSJT8-30-1 Anatomy & Physiology	USSJT9-30-2 Scientific Practice	USSKL9-30-2 Pathophysiological Sciences A	USSKLA-30-2 Pathophysiological Sciences B	USSJTC-30-2 Prof. Aspects of Health. Sci.	USSJY3-30-3 Advanced Cardiac Phys. & Neuro.	USSJY4-30-3 Applied Cardiac Physiology	USSJYB-30-3 Adv. Res. & Sle. Physiology	USSJYC-30-3 Applied Neuro., Res. & Sle. Phys.	USSJSJ-30-3 Healthcare Science Project	USSJSK-30-3 Prof. Prac. for Health. Sci.	USSKLM-30-3 Prof. Healthcare Science Practice
	<b>A) Knowledge and understanding of:</b>														
Demonstrate knowledge of cell biology, anatomy, physiology, pharmacology and pathology that provides the foundation for studying the Physiological Sciences pathways of Healthcare Science.	x		x	x		x	x								
Understand the context of healthcare sciences and their application to practical problems.		x	x					x					x	x	x
Understand a broad range of diagnostic and therapeutic measurement techniques including the rationale for the investigation, modification of the investigation, interpretation of test results and treatment of disease.		x				x	x	x	x	x	x	x			
Demonstrate competence in specific areas of physiological measurement with an understanding of the principles underlying the techniques used.		x				x	x		x	x	x	x			
Demonstrate an understanding of the research, development and innovation across the NHS and in healthcare science in particular.					x								x	x	x
<b>(B) Intellectual Skills</b>															
Actively question and seek relevant information.		x			x				x	x	x	x	x	x	x
Compare and contrast information from different sources online and offline.	x		x	x					x	x	x	x	x		

Part 3: Learning Outcomes of the Programme																						
Critically evaluate information against hypotheses in a range of research scenarios.										x	x		x	x	x	x	x					
Actively analyse and apply problem-solving strategies.										x	x		x	x	x	x	x					
Demonstrate independent self-directed learning, and skills for life-long learning.												x	x	x	x	x	x	x	x			
<b>(C) Subject/Professional/Practical Skills</b>																						
Understand the importance of patient-centred care, evidence based practice, clinical audit and multidisciplinary team working.																	x	x	x			
Critically observe, analyse and evaluate information arising from a wide range of sources.													x	x	x	x	x	x	x			
Apply practical approaches to the study of selective aspects of healthcare science and demonstrate an awareness of safety and good workplace practice.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Communicate effectively scientific data and concepts using a range of communication strategies.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Develop discipline-specific interests by specialising within the programme in relation to subject and/or career aspirations.										x	x	x	x	x	x	x	x	x	x			
Obtain, record, collate and critically analyse data using appropriate practical techniques, working as an individual or within a group.	x			x	x	x							x	x	x	x	x					
Demonstrate an understanding of the research process, including the current ethical and legal frameworks within which human and animal research can be conducted in the UK, through the execution of a research project.																		x	x	x		
<b>(D) Transferable skills and other attributes</b>																						
Communicate information, advice, instruction and professional opinion to colleagues, patients, clients, users, their relatives and carers.																			x	x	x	
Critically analyse data arising from various means of biological or work-based inquiry.														x	x	x	x	x	x	x		
Undertake active learning and development.																			x	x	x	
Apply information management skills to their learning and practice.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Work effectively as a team member.	x	x	x	x						x	x	x	x	x	x	x	x	x	x	x		
Demonstrate an autonomous and reflective approach to lifelong learning.																				x	x	x

**Part 4: 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 1	<ul style="list-style-type: none"> <li>• USSKA9-30-1 Introduction to Physiological Science</li> </ul>	<p>Students will be allocated to one of the following two programme delivery routes:</p> <p><b>Placement (Cardiac Physiology, Respiratory &amp; Sleep Physiology)</b></p> <ul style="list-style-type: none"> <li>• USSKA3-30-1 Anatomy &amp; Physiology</li> <li>• USSKA5-30-1 Biomedical Skills</li> <li>• USSKA4-30-1 Cell Biology, Biochemistry &amp; Genetics</li> </ul> <p><b>In-post (All pathways)</b></p> <ul style="list-style-type: none"> <li>• USSJT8-30-1 Anatomy &amp; Physiology</li> <li>• USSJT6-30-1 Principles in Healthcare Science</li> <li>• USSJT5-30-1 Scientific Basis of Life</li> </ul>	<p>Cert HE Healthcare Science</p> <p>Credit requirements: 120 (not less than 120 at Level 1 or above)</p>

		Compulsory Modules	Optional Modules	Interim Awards
	Year 2	<p><b>Placement</b></p> <ul style="list-style-type: none"> <li>• USSKAR-30-2 Practice and Communication of Science</li> <li>• USSKMB-30-2 Diagnostic &amp; Professional Practice in Healthcare Science</li> </ul> <p><b>In-post</b></p> <ul style="list-style-type: none"> <li>• USSJT9-30-2 Scientific Practice</li> <li>• USSJTC-30-2 Professional Aspects of Healthcare Science</li> <li>• USSKL9-30-2 Pathophysiological Sciences A</li> <li>• USSKLA-30-2 Pathophysiological Sciences B</li> </ul>	<p><b>Placement</b></p> <p>Students must opt for one of the following two pathways:</p> <p><b>Cardiac Physiology</b></p> <ul style="list-style-type: none"> <li>• USSKAW-30-2 Cardiovascular Physiology &amp; Pathophysiology A</li> <li>• USSKAX-30-2 Cardiovascular Physiology &amp; Pathophysiology B</li> </ul> <p><b>Respiratory &amp; Sleep Physiology</b></p> <ul style="list-style-type: none"> <li>• USSKAY-30-2 Respiratory &amp; Sleep Physiology &amp; Pathophysiology A</li> <li>• USSKBA-30-2 Respiratory &amp; Sleep Physiology &amp; Pathophysiology B</li> </ul>	<p>Dip HE Healthcare Science</p> <p>Credit requirements: 240 (not less than 100 at Level 2 or above, and 120 at Level 1 or above)</p>



	Compulsory Modules	Optional Modules	Interim Awards
Year 3	<ul style="list-style-type: none"> <li>USSJSJ-30-3 Healthcare Science Project</li> </ul> <p><b>Placement &amp; In-post (non degree apprenticeship)</b></p> <ul style="list-style-type: none"> <li>USSJSK-30-3 Professional Practice for Healthcare Science</li> </ul> <p><b>In-post (degree apprenticeship – contains <a href="#">End Point Assessment</a>)</b></p> <ul style="list-style-type: none"> <li>USSKLM-30-3 Professional Healthcare Science Practice</li> </ul>	<p>Students are allocated to one of the following three pathways:</p> <p><b>Cardiac Physiology</b></p> <ul style="list-style-type: none"> <li>USSJY3-30-3 Advanced Cardiac Physiology &amp; Neurophysiology</li> <li>USSJY4-30-3 Applied Cardiac Physiology</li> </ul> <p><b>Respiratory &amp; Sleep Physiology</b></p> <ul style="list-style-type: none"> <li>USSJYB-30-3 Advanced Respiratory &amp; Sleep Physiology</li> <li>USSJYC-30-3 Applied Neurophysiology, Respiratory &amp; Sleep Physiology</li> </ul> <p><b>Neurophysiology (in-post only)</b></p> <ul style="list-style-type: none"> <li>USSJYC-30-3 Applied Neurophysiology, Respiratory &amp; Sleep Physiology</li> <li>USSJY3-30-3 Advanced Cardiac Physiology &amp; Neurophysiology</li> </ul> <p>Due to professional portfolio requirements students will not be able to transfer between pathways within Year 3</p>	<p>BSc Healthcare Science</p> <p>Credit requirements: 300 (of which not less than 60 are Level 3 or above, 100 are at Level 2 or above, and 120 are Level 1 or above)</p>

**GRADUATION**

### Part 5: Entry Requirements

The University's Standard Entry Requirements apply with the following additions/exceptions for **in-post delivery**:

- Candidates must be in employment in a relevant role in a physiological sciences department. Note: to access funding from the employing institution's apprenticeship levy the candidate must be employed in a higher apprenticeship role (further details on the Education & Skills Funding Agency funding requirements can be found [here](#)).
- Equivalent qualifications and/or work experience may also be acceptable (refer to UWE website for requirements) and would be judged on individual merit.
- All students graduating from the UWE C992 FdSc Healthcare Science programme (with a Physiological Sciences specialism) will be eligible to enter the BSc Healthcare Science (Physiological Sciences) at Level 6. The FdSc is identical to the BSc at Levels 4 & 5.

Tariff points as appropriate for the year of entry - up to date requirements are available through the [courses database](#).

**Health assessment/declaration/vaccinations.** Applicants must be in good health and be up-to-date with routine immunisations e.g. tetanus, diphtheria, polio and MMR. Applicants who are offered a place will be required to complete a questionnaire and must be prepared to undergo a medical examination. Applicants will also be required to confirm their status in respect of a number of infectious diseases and immunisations (tuberculosis, measles, mumps, rubella, chicken pox, varicella, hepatitis B, hepatitis C, HIV antibodies) and be prepared to have all required vaccinations. If vaccinations are not up-to-date this will affect ability to continue on the course. Concerns with regards to vaccinations should be raised at the point of application.

**Disclosure of Criminal Background** - the Rehabilitation of Offenders Act 1974 does not apply and all convictions, including those which are spent, must be disclosed. This is in accordance with the Rehabilitation of Offenders Act 1974 (Exceptions) Order 1975. Applicants who are offered a place must undergo a Disclosure and Barring Service (DBS) check and will be required to complete a Disclosure Application Form. All information will be treated in confidence and only taken into account when absolutely necessary.

### Part 6: Reference Points and Benchmarks

#### [QAA UK Quality Code for HE](#)

- Framework for higher education qualifications (FHEQ)
- Subject benchmark statements
  - Biomedical Science (2015)
  - Biosciences (2015)

#### [UWE Strategy 2020](#)

#### [UWE academic policies](#)

#### [UWE Education for Sustainable Development](#)

The course adheres to the professional body requirements for the:

- [National School of Healthcare Science](#) (Practitioner Training Programme in Physiological Sciences)
- [Registration Council for Clinical Physiologists](#) (Practitioner Training Programme in Physiological Sciences)

The in-post delivery of the course is aligned to the requirements of the Education & Skills Funding Agency [Level 6 Healthcare Science Practitioner Degree Apprenticeship Standard](#).

## FOR OFFICE USE ONLY

First CAP Approval Date	28/03/2014			
Revision CAP Approval Date	31/05/2017	Version	3	<a href="#">Link to MIA 10686</a> <a href="#">Link to RIA 12283</a>
Next Periodic Curriculum Review due date				
Date of last Periodic Curriculum Review				