

PROGRAMME SPECIFICATION – Premedical Sciences Cert. H.E. (C99H)

Part 1: Basic Data		
Awarding Institution	University of the West of England (UWE), Bristol	
Teaching Institution	UWE	
Delivery Location	UWE	
Faculty responsible for programme	Health and Applied Sciences (HAS)	
Department responsible for programme	Biomedical, Biological and Analytical Sciences (BBAS)	
Modular Scheme Title	Applied Sciences	
Professional Statutory or Regulatory Body Links	N/A	
Highest Award Title	Cert. H.E. Premedical Sciences	
Default Award Title		
Fall-back Award Title	N/A	
Interim Award Titles	Cert. H.E. Health Sciences	
UWE Progression Route	N/A	
Mode(s) of Delivery	FT (with Foundation Year)	
Codes	UCAS:	JACS:
	ISIS2:	HESA:
Relevant QAA Subject Benchmark Statements	Biosciences and Biomedical sciences	
CAP Approval Date	19 November 2015	
Valid from	September 2016	
Valid until Date	September 2022	
Version	1	

Part 2: Educational Aims of the Programme
<p>This two year Level 0 Science Foundation with subsequent Level 1 Cert. HE Premedical Sciences) programme is designed primarily for international students, but also home students, who are interested in attaining a qualification that would allow them to progress onto a guaranteed placement on a subsequent 4 year medical degree course at St. Georges University (SGU) in Grenada, West Indies. The programme is within our extensive biomedical science provision with an emphasis on the application of level 1 biomedical sciences and provision of a relevant education that affords them the opportunity to either progress as described above or alternatively to progress onto subsequent levels of our existing biomedical sciences BSc programme.</p> <ul style="list-style-type: none"> • The programme provides: • a coherent programme of study that effectively provides the knowledge and education suited to the above purpose. • students with a degree route within an accredited programme suited to their subsequent

Part 2: Educational Aims of the Programme

pursuit of a medical degree

- opportunities for students from a range of international backgrounds to develop and realise their potential in a supportive and responsive teaching and learning environment
- added value for learners in their subject-specific knowledge and transferable skills
- a programme responsive to feedback from students, external examiners and other stakeholders as part of quality programme management and enhancement
- appropriate facilities and resources to deliver a quality teaching and learning experience

The programme integrates an initial level 0 Science Foundation year with a subsequent year of study that incorporates a range of existing level 1 biomedical sciences and additional subjects, as requested by SGU, in the study of the biology of medicine. The combination of modules offered enables students to reach a level of understanding in the science of the causes, diagnosis and treatment of disease and to gain an appropriate professional approach to learning such that they can progress as detailed above.

Level 0 gives students an appropriate grounding in the subject areas of biology, chemistry, physics, mathematics, and psychology. This grounding, in addition to the development of transferable skills, prepares learners to successfully study science related subjects at Level 1 and beyond. Students successfully completing the initial science foundation year have two possible progression routes with different requirements.

Students must achieve a minimum score of 70% overall at level 0 in order to be eligible to progress to level 1 of the Cert HE Premedical Sciences award. This is an SGU requirement.

Students passing the Foundation Science Year, but who achieve less than 70% overall can progress to either the Biomedical, Biological or Environmental Sciences programmes in HAS at UWE.

Students who then successfully complete the Cert. H.E. Premedical Sciences programme also have two possible progression routes with the different requirements below.

Students achieving a premedical sciences programme (all 150 credits at L1) score of 65% overall with not less than 60% in any one module and obtaining an appropriate academic reference from the Dean of the faculty of HAS are guaranteed progression to a place on the 4 year MD programme at SGU.

Students passing the four 30 credit core L1 modules (USSJYD-30-1, USSK64-30-1, USSK63-30-1 and USSKA5-30-1) of the programme with an overall score of >40%, but who do not meet the above criteria for progression to SGU can progress to L2 of the BSc Biomedical Sciences programme in HAS at UWE.

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

Successful graduates will have a strong foundation in the subject areas of human anatomy and physiology, biochemistry, microbiology, molecular biology and genetics that underpin an understanding of human health. Students will have gained an understanding of the science of the causes, diagnosis and treatment of disease and to gain an appropriate professional approach to learning such that they can progress to either a 4 year medical degree course at St. Georges University (SGU) in Grenada, West Indies or one of the Biomedical, Biological or Environmental Sciences programmes at UWE.

Part 2: Educational Aims of the Programme

Part 3: Learning Outcomes of the Programme

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

On completion of the initial science foundation year 0 students should be able to demonstrate the attributes outlined in the table below:

Learning Outcomes: (Levels 0, 1 and 2, including L2 Optional – O – modules)	L0 USSKCJ-30-0 Biology in Practice	L0 USSCKK-30-0 Chemistry in Practice	L0 USSKCL-30-0 Skills for Science	L0 USSKCM-30-0 People and Science
A) Knowledge and understanding of:				
Structure and function of the natural world	■	■	■	■
The techniques used to gather and critically analyse data in the natural sciences	■	■	■	■
Laboratory practical (P); Research skills (R)	P	P	P	P
(B) Intellectual Skills				
Students will develop the ability to:				
Actively question and seek relevant information	■	■	■	■
Compare and contrast information from different sources online and offline	■	■	■	■
Critically evaluate information against hypotheses in a range of research scenarios	■	■	■	■
Actively analyse and apply problem-solving strategies	■	■	■	■
Demonstrate independent self-directed learning, and skills for life-long learning	■	■	■	■
(C) Subject/Professional/Practical Skills				
Students will develop the ability to:				
Critically observe, analyse and evaluate information arising from a wide range of sources	■	■	■	■
Apply practical approaches to studying (biomedical) science, and be aware of research governance including safety and good laboratory practice	■	■	■	■
Communicate effectively scientific data and concepts in written and oral form	■	■	■	■
(D) Transferable skills and other attributes				
Students will develop the ability to:				
Communicate effectively and appropriately using a variety of methods	■	■	■	■
Critically and statistically present and analyse data arising from various means of inquiry	■	■	■	■
Undertake active learning and development	■	■	■	■
Apply information management skills	■	■	■	■
Practice effective time management and become independent and lifelong learners	■	■	■	■
Evaluate performance of self and others through reflective practice and observation				■

More subject specifically, on completion of the year 1 Premedical Sciences Cert. H.E. programme students should be able to demonstrate:

A. Knowledge and Understanding (subject specific)

1. demonstrate a broad knowledge base in understanding areas underpinning and relevant to medical sciences and to medicine (*i.e.* relevant knowledge of biochemistry, genetics,

Part 3: Learning Outcomes of the Programme

molecular biology, human anatomy and physiology, microbiology and diseases and their diagnosis)

2. understand the context of medical sciences and their application to practical problems in medicine
3. demonstrate competency in the process of scientific measurement and begin to understand the underlying principles of the techniques used and the analysis of data obtained
4. demonstrate an understanding of the contribution of research and scholarship in the area of medical sciences and develop a professional and appropriate attitude to learning within this subject area.

B. Intellectual Skills (generic)

1. Actively seek, gather and show the ability to question information garnered from different sources
2. Begin to evaluate information against hypotheses driven ideas in a range of scenarios
3. Learn problem-solving strategies and begin to apply these and demonstrate a potential analytical aptitude
4. Demonstrate an ability to move towards independent and self-directed learning

C. Subject/Professional/Practical Skills (subject specific)

1. Observe, analyse and evaluate information arising from a wide range of sources
2. Apply practical approaches to the study of selective aspects of the medical sciences and demonstrate an awareness of safety and good laboratory practice.
3. Communicate effectively scientific data and concepts
4. Understand the ethical considerations inherent to the medical profession
5. Show an understanding of what it means to work in a medical setting

D. Transferable Skills and other attributes (generic)

1. Communicate effectively and appropriately using a variety of methods
2. Analyse data arising from various means of biological inquiry
3. Undertake active learning and development
4. Apply information management skills
5. Practice effective time management
6. Evaluate self-performance

Learning Outcomes:	A and P USSJD-30-1	CB and G USSK64-30-1	P of D USSK63-30-1	BS USSKA5-30-1	MBM USSJYP-15-1	PS for M USSJYH-15-1
A) Knowledge and understanding of:						
1 The sciences relevant to medicine	X	X	X		X	
2 The context of medical sciences	X	X	X	X	X	X
3 Techniques and underlying principles	X	X	X	X	X	
4 Research in medicine	X	X	X	X	X	
(B) Intellectual Skills						
1 Information gathering	X	X	X	X	X	X

Part 3: Learning Outcomes of the Programme

2 Form and evaluate hypotheses		X		X	X	
3 Learn and apply problem solving skills		X		X		
4 Self-directed independent learning	X	X	X	X	X	X
(C) Subject/Professional/Practical Skills						
1 Perform information and data analysis	X	X	X	X	X	X
2 Engage in practical enquiry	X	X	X	X	X	
3 Communicate effectively	X	X	X	X	X	X
4 Understand medical ethics						X
5 Understand the medical workplace						X
(D) Transferable skills and other attributes						
1 Communication via different methods	X	X	X	X	X	X
2 Data analysis	X	X	X	X	X	
3 Active learning and development	X	X	X	X	X	X
4 Information management	X	X	X	X	X	X
5 Effective time management	X	X	X	X	X	X
6 Evaluation of self-performance	X	X	X	X	X	X

Part 4: Student Learning and Student Support

Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

A Student Handbook is provided, during Induction, which includes information on the Faculty, the University, its regulations and procedures. Subsequently, induction is provided to enable students to plan their study of modules as effectively as possible, a patterned calendar of assessments across the academic year is produced. Detailed information is distributed in guides at the start of each module.

Students are supported during their time at UWE by their student adviser and by their Personal Academic Tutor as part of the Student Experience programme, this to provide a university-wide learning opportunity for students to support their learning, offer guidance for their Personal Development Planning, and enhance their chances of being successful in their future endeavors. Students will meet programme-specific tutors on a weekly basis throughout the year.

For all students, access to academic staff and the student advisor is by student e-mail or by personal access, and central University student support provides support and guidance to students on a wide range of issues. The library at Frenchay campus provides an extensive range of literature for the programme. Students have 24-hour access to computers, and IT support services are available within the Faculty of Health & Applied Sciences and from the University's Computing Helpdesk.

The Faculty has a longstanding investment in web-based support for teaching and learning; the provision of supplementary material and access to diagnostic testing of understanding and knowledge is now available through UWE's VLE, (Blackboard).

The Faculty has a well-equipped range of general laboratories, specialised scientific equipment and specialist facilities appropriate for teaching and research in biosciences,

Part 4: Student Learning and Student Support

biomedicine, psychology and chemical and physical sciences. Support for laboratory-based scientific inquiry, enabled by this provision is enhanced by core research methods elements within the modules of this programme. In the premedical sciences year of this programme students develop a range of key skills required of a medical scientist wishing to progress onto a medical degree, including literature searches, critical review, research methodology, problem-solving, and IT and communication skills. Frequent assessment strategies through the use of derivative multiple choice questions with immediate feedback online are aimed at preparing students for the fast and accurate factual recall environment of medical school and drive both continuous engagement and attentive learning throughout the programme. In addition, some of the traditional scheduled learning will be replaced by visits within a healthcare setting which will be supported by access to technology enhanced learning resources such as the Second-life 'Greenbank' scenarios and 'Virtual Patient', which provide online problem-based learning and discussion stimuli (<http://vps.uwe.ac.uk/>).

At UWE, Bristol there is a policy for a minimum average requirement of 12 hours/week contact time over the course of the full undergraduate programme. This contact time encompasses a range of face: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.

Across the two year programme teaching is a mix of scheduled and independent learning. For this course:

Scheduled learning includes lectures, tutorials, demonstration, practical classes and external visits.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion *etc.*

For illustrative purposes, an overview of the hours of scheduled and independent learning across the premedical sciences Cert HE component of the programme is shown in the table below

Part 4: Student Learning and Student Support

Module	Hours of Scheduled/Independent Learning Over Academic Year (24 weeks of teaching)						
	Lectures	Practicals	Computer Practical	Tutorials	MCQ Tests	Coursework Preparation/ Revision	Row total
Anatomy and Physiology (Premedical Sciences) USSJYD-30-1	48	16		8	6		78
Pathophysiology of Disease (Premedical Sciences) USSK63-30-1	48	16		8	6		78
Cell Biochemistry and Genetics (Premedical Sciences) USSK64-30-1	48	16		8	6		78
Molecular Biology for Medicine (Premedical Sciences) USSJYP-15-1	24	-	-	12	3		39
Biomedical Skills USSXX9-30-1	36	10	6	20	-		72
Professional Studies for Medicine (Premedical Sciences) USSJYH-15-1	18	12		6	-		36
Total Scheduled Learning	222	70	6	62	21	-	381
Total Associated Independent Learning	333	70	6	62	42	606	1119

Description of any Distinctive Features

Professional Accreditation

The core of the premedical sciences year of the programme is very much based on level 1 of the current Biomedical Sciences BSc programme in Health and Applied Sciences which is currently accredited by the Institute of Biomedical Science (IBMS).

Preparation for Medical School

In particular the aim of this programme is to prepare students for the transition to SGU to undertake a medical degree. Thus, the teaching and learning emphasis of the programme is designed to expose students to a teaching style that they may be expected to encounter during this subsequent undertaking. A culture of continual learning and reading is thus, fundamental to the programme and is enforced by frequent assessment and constant feedback on performance. Exposure to a medical setting and the provision of learning materials relevant to this is provided within specialist modules designed specifically for this programme.

Part 5: Assessment

Approved to [University Regulations and Procedures](#)

Assessment Strategy

Part 5: Assessment

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

A broad range of assessments, commensurate with monitoring all the learning outcomes, detailed in part 3, are employed within this programme. The assessment strategy employed incorporates both that of the Department and the QAA code of Practice on the Assessment of Students. The assessment procedures, processes, timings of implementation and marking criteria are set out for each of the modules within the programme in handbooks which are made available to students at the outset. These are further summarised in the Assessment Calendar which is provided online via the UWE Portal and which also facilitates the appropriate scheduling of assessment loading throughout the year.

Individual assessments within each of the modules recognise that the use of different approaches to learning is key to the overall development and progression of the student. Thus, assessments engage with various modalities of learning, including those derived from actual experience, abstract conceptualization, reflective observation and active experimentation and which result from the auditory, visual and tactile learning approaches used during lectures, practical classes, tutorials, workplace visits and during the independent learning of students using a variety of online resources.

Thus, the Assessment Strategy has been designed to support and enhance the development of both subject-based and key generic skills and to allow students to realise their potential. The focus is on assessments that link directly to their progression to undertaking a medical degree at SGU as well as assessments for learning. In particular, the programme has a strong focus on the use of frequent assessments and feedback using multiple forms of MCQs as a method of enhancing and reinforcing a continual learning/engagement philosophy. Such assessments make use of technology enhanced learning (TEL) developments within the department. Assessments are designed to achieve the learning outcomes for each module and these are described in each of the relevant module specifications.

The range of assessments used and their use within individual modules is outlined below in the assessment map.

Assessment Map

The programme encompasses a range of **assessment methods** including; written exams, in class multiple choice question exams, oral presentation of posters, practical reports, written essays, case study reports, data handling and analysis reports and preparation of a reflective portfolio. These are detailed in the following assessment maps:

<i>Year 0 Foundation Year</i>		Unseen Written Exam	Practical Exam/Skills Assessment	Oral assessment and/or presentation	Written Assignment (essay or case study)	Written Assignment (data and statistics)	(Lab/Practical) Portfolio
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 (30)	B (30)
	USSKCL-30-0 Skills for Science	A (40)				B (60)	

Part 5: Assessment


	USSKCM-30-0 People and Science	A (40)		B (30)		B (30)	
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Year 1 Premedical Sciences Cert HE		Unseen Written Exam	Oral viva	In class MCQ Test	Practical Exam including Practical Skills Assessment	Oral assessment and/or presentation of poster	Essay based Written Assignment	Practical Report (including data analysis within case studies)	Portfolio
Compulsory Modules Level 1	USSJYD-30-1	A(40)		B(30)	B(15)			B(15)	
	USSK64-30-1	A(40)		B(30)			B(15)	B(15)	
	USSK63-30-1	A(40)		B(30)		B(15)		B(15)	
	USSXX9-30-1	A(40)						B(30)	B(30)
	USSJYP-15-1	A(40)		B(30)				B(30)	
	USSJYH-15-1		A(40)				B(60)		


*Assessment should be shown in terms of either **Written Exams**, **Practical exams**, or **Coursework** as indicated by the colour coding above.

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	USSKCKJ-30-0 Biology in Practice	None	<i>n.b.</i> To progress to the premedical sciences Cert HE component of the programme students must attain 70% or higher in the year 0 science foundation component. Students who pass year 0, but who attain <70% can progress to L1 Biomedical Sciences, Biological or Environmental programmes in HAS.
		USSKCK-30-0 Chemistry in Practice		
		USSKCL-30-0 Skills for Science		
		USSKCM-30-0 People and Science		

		Compulsory Modules	Optional Modules	Interim Awards
	Year 1	USSJYD-30-1 Anatomy and Physiology (Premedical Sciences)	None	Interim Award Cert HE Health Science Credit requirements; 120 level 1 credits <i>n.b.</i> For a student who does not progress to SGU, their alternative progression to L2 of the BSc Biomedical Sciences programme in HAS requires the student to have passed all four of the 30 credit core modules (USSJYD-30-1, USSK64-30-1, USSK63-30-1 and USSXX9-30-1) of this programme.
		USSK64-30-1 Cell Biochemistry and Genetics (Premedical Sciences)		
		USSK63-30-1 Pathophysiology of Disease (Premedical Sciences)		
		USSKA5-30-1 Biomedical Skills		
		USSJYP-15-1 Molecular Biology for Medicine (Premedical Sciences)		



USSJYH-15-1 Professional Studies for Medicine (Premedical Sciences)			Highest Award Cert HE Premedical Science Credit requirements; 150 credits at level 1 <i>n.b. In order to progress to SGU the highest award must be obtained with a score of 65% overall and not less than 60% in any one module.</i>
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GRADUATION

Part time:

Due to the nature of the programme and the requirements of SGU in terms of progression, there is no part time route for this programme.

Part 7: Entry Requirements

The University's Standard Entry Requirements apply with the following additions

For entry into the Premedical Sciences Cert HE programme

Required A-Level (or equivalent) subjects: Chemistry and Biology plus either Physics or Maths (320 UCAS tariff points) or 70% min. in year 0 Science Foundation in HAS at UWE.

International Baccalaureate Diploma: Minimum 32 points, 555 in three HL sciences (Chemistry, Biology and either Maths or Physics).

English Language

GCSE English Language Grade C or above or overall IELTS score of 7 with min. 6.0 in any component or equivalent.

Part 8: Reference Points and Benchmarks

The mission and vision of the University of the West of England is to

'advance an inclusive, civilised and democratic society and its enrichment through education, consultancy and public service'

The aims of the Department of Biological, Biomedical and Analytical Sciences and the undergraduate programme in Premedical Sciences are entirely consistent with this and are firmly set within this context.

Part 8: Reference Points and Benchmarks

• **Qualification descriptors used in the QAA Framework for Higher Education Qualifications**

The learning outcomes for the programme have been developed with reference to the qualification descriptors used in the QAA Framework for Higher Education Qualifications. The learning outcomes for the modules undertaken during the year of the course have been considered to be consistent with the award of a Certificate in Higher Education. Graduates of the award will have acquired the knowledge and understanding, and gained the intellectual, subject, professional, practical and transferable skills listed in Part 3.

• **Subject benchmarks**

Biomedical Science - The Cert. HE Premedical Science programme is consistent with the level 1 Biomedical Science benchmark with a multi-disciplinary approach. The Basic Knowledge sub-headings within the Biomedicine benchmark are listed as human anatomy and physiology, cell biology, biochemistry, genetics, molecular biology, immunology and microbiology, all of which map to modules in this programme. This provides students with an integrated knowledge of the human body at a physiological, cellular, molecular and genetic level, in both health and disease.

The level 1 modules within this premedical sciences programme provide a sound foundation of generic biomedical content covering the biology of disease, biochemistry, microbiology, and genetics. Students gain an appreciation of biomedical science as a “multidisciplinary approach to the study of human disease” and will also develop “an awareness of the current methods used for the laboratory investigation, diagnosis and monitoring of disease”. The programme also contains a professional module aimed at developing skills essential for working in a medical setting and a molecular biology module which provides learning in the applied research pertinent to therapies used in a medical context..

Biosciences - By definition, according to the Biosciences Benchmark Statement, the biosciences are “a family of methods and disciplines grouped around the investigation of life processes”; “practical and experimental subjects”; and “subjects that combine scientific rigour with an acceptance of diversity and variability”, all of which are fundamental principles for Biomedical Science. The following statement is relevant to this programme: “Studies in the biosciences encourage an understanding of multidisciplinary, an enquiring attitude and an appreciation of complexity. They require development of competence in team and individual working as well as in numeracy. Programmes also develop proficiency in preparing reports in a written format for many different purposes and in delivering presentations”.

In relation to the benchmark threshold standard for degree programmes where the study of organisms is key, it is stated that students should be able to: “describe basic organism structure and diversity”; “describe mechanisms for the life processes and appreciate how the physiology of an organism fits it for its environment”; “show an appreciation of the integration of metabolism”; “show knowledge of the basic genetic principles relating to and evolution of the organisms studied”; and “appreciate the importance of the ‘behaviour’ of the organisms studied”. These threshold standards can be met to level 1 standard through a range of modules within this programme.

University teaching and learning policies

In line with the University's teaching and learning policies, this programme takes a student-centered 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

Part 8: Reference Points and Benchmarks

the learning process. The programme seeks to create an environment that stimulates students to 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 is incorporated within the programme to cater for a diversity of student strengths and abilities. 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 comply with the University Assessment Policy, Academic Regulations and Procedures and the Workbased Learning Policy <http://www1.uwe.ac.uk/aboutus/policies>

Staff research projects

Academic staff who support the programme have specific expertise in their subject area. The modules are strongly underpinned by the research expertise of the programme team. The quality, management and enhancement (QME) of the provision is underpinned by staff development, including research. Staff development includes personal review via the appraisal and development scheme, in-house training and support to attend external courses and conferences. The Faculty is supportive of staff development; each member of staff may call upon funds to support attendance at conferences etc. New academic staff undertake a one-year Professional Development PGCert programme, which is accredited by the Higher Education Academy (HEA).

The majority of staff involved with the programmes are research active and the Faculty strongly supports the research activities, particularly within the Centre for Research in Biosciences (CRIB), which was submitted to RAE2008 in UoA12 – Allied Health Professions and Studies. According to the REF 2014 UWE has proportionately more internationally excellent research than any other University in the UK. Furthermore, the Times Higher Education RAE ratings placed our Biomedical Science research within the top 10% of University submissions. This highlights the world class research being undertaken in CRIB.

Employer interaction/feedback

The integrated nature of the programme necessitates ongoing and close liaison with employers of Healthcare Scientists and Medics and close liaison with St Georges University (SGU) who provide the progression route for students graduating from this programme. This is extremely important and is achieved in the following ways:

Informal links

A culture of two-way communication exists, and is encouraged, between University academic staff and healthcare practitioners. UWE has representation on the local IBMS Branch Committee and several of the associated discussion groups. These and many other opportunities for sharing ideas and views exist and are actively used to the advantage of all parties. Practitioners are actively involved in the design, delivery and continued development of the Healthcare Science (Life Sciences) programmes. Similarly, service users are consulted on a regular basis to ensure that the programmes deliver training that matches service needs. Additionally there are numerous informal links between staff associated with this programme and staff at SGU who teach in similar subject areas that prepare students to progress to a medical degree.

Formal links

The Joint Training Officer's Committee monitors and advises on the operation of the Clinical Pathology Accreditation/IBMS accredited training places in accordance with agreed standards

Part 8: Reference Points and Benchmarks

and policies. In addition, this committee provides a valuable forum for practitioners' views on the undergraduate provision, and for discussion pertaining to development of the degree programme.

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.

During the development of this programme and since this programme is designed to allow students to progress to a medical degree programme at St Georges University (SGU) in Grenada, we have given faculty teaching staff and executive personnel at SGU significant opportunity to comment on both the content, format and delivery of this programme and have made adjustments accordingly to ensure that the quality and style of learning are appropriate. With this in mind, members of the design team here have had a number of video conferences with SGU staff and visits by UWE staff have been made to SGU and *vice versa*. Their main input has concerned curriculum content and modes of assessment. Thus, although in the main this programme is based on level 1 of the BSc in Biomedical Sciences programme which is offered by the dept. of Biomedical, Biological and Analytical Sciences in HAS, a bespoke module in Molecular Biology has been developed specifically for this programme in order to give students the requisite experience in this area required to progress to a medical degree programme. In similar vein, the programme has been designed to include a Professional Studies for Medicine module which will give students experience of working within a healthcare/medical setting. Such consultation has continued and has been invaluable in developing the resources that allow this programme to apply appropriate learning and assessment approaches in preparing students to progress to a medical degree.

Finally, current UWE students on both this programme and the biomedical sciences programme have been consulted for their opinions concerning the manner in which their engagement and learning is managed within the teaching environment. Overall, feedback from such students has been very positive but has highlighted issues with some online resources used for undertaking assessments and this has been addressed in terms of sourcing more robust TEL software packages which are better suited to engendering a multi-approach learning style within the programme.

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](#).