University of the West of England
BRISTOL

PROGRAMME SPECIFICATION

Section 1: Basic Data

Awarding institution/body	University of the West of England
Teaching institution	University of the West of England
Delivery Location(s)	Frenchay and Glenside campuses
Faculty responsible for programme	Health and Life Sciences
Modular Scheme title	Applied Sciences
Professional Statutory or Regulatory Body Links (type and dates)	Institute of Biomedical Sciences Health Professions Council Medical Education England
Highest award title	BSc (Hons) Healthcare Science (Life Sciences) With pathways in BSc (Hons) Healthcare Science (Blood Science), BSc (Hons) Healthcare Science (Genetic Science), BSc (Hons) Healthcare Science (Infection Science), and BSc (Hons) Healthcare Science (Tissue Science).
Default award title	
Interim award titles	Cert.HE Healthcare Science Dip. HE Healthcare Science BSc Healthcare Science
UWE progression route	N/A
Mode(s) of delivery	Full time / Part time
Codes **UCAS code**	**JACS code** C990
ISIS code	**HESA code**
Relevant QAA subject benchmark statements	Biosciences & Biomedical Science
On-going/valid until* (*delete as appropriate/insert end date)	On-going
Valid from (insert date if appropriate)	September 2011

Original Validation Date: 1st December 2010

Latest Committee Approval: Quality and Standards Committee **Date:** Summer 2010

Version Code 1

Section 2: Educational aims of the programme

The BSc (Hons) Healthcare Science (Life Sciences) programme is part of the university's extensive Biomedical Science provision to provide the principal 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. 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.

Specifically, the aim of the programme is to provide:

- A broad knowledge base in biosciences with specific areas of deeper understanding relevant to healthcare sciences
- Integration of a wide range of subjects in the study of the biology of disease
- The causes, diagnosis and treatment of disease through the combination of modules studied
- Cutting edge healthcare sciences using state of the art equipment and learning support material
- Experiential placements within the first year to introduce Healthcare Science in practice and give the student a wide appreciation of the four pathways within Life Science.
- An understanding of the importance of patient centred care, evidence based practice, clinical audit and multidisciplinary team working.
- Practical experience of working in laboratory medicine placements throughout the Healthcare Science (Life Sciences) programme enabling the student to perform a wide range of relevant methods and techniques and to undertake a project in a working context.
- Extensive use of blended approaches to support work-based-learning.
- The underpinning knowledge and skills to enable students to gain the skills and attitudes to work as a Healthcare Science Practitioner
- Specialist knowledge, skills and experience within pathways specifically designed for the pursuance of a career as a Healthcare Scientist in the NHS.
- Quality enhancement that incorporates stakeholders views and feedback as critical to maintaining "Fitness for purpose and practice"

Section 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: …

A Knowledge and understanding

Learning outcomes	Teaching, Learning and Assessment Strategies
A Knowledge and understanding of: Students will be able to 1. Demonstrate the underpinning knowledge of anatomy, physiology, pharmacology, pathology, biochemistry, immunology, epidemiology, genetics, and microbiology to provide the foundations for study in any of the Life Science pathways of Healthcare Science. 2. Understand the context of healthcare sciences and their application to practical problems 3. Understand a broad range of diagnostic laboratory measurement techniques including the rationale for the investigation, interpretation of test results and treatment of disease 4. Demonstrate competence in specific areas of laboratory measurement with an understanding of the principles underlying the techniques used 5. Demonstate an understanding of the research, development and innovation across the NHS and in healthcare science in particular.	**Teaching/learning methods and strategies:** Acquisition of knowledge is achieved through a variety of methods including lectures, practicals, seminars, tutorials, case studies, project work, training placements and completion of their associated training portfolios. Additional support is provided through technological approaches including Blackboard and the Profile website. Throughout, the learner is encouraged to undertake independent reading both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject. **Assessment:** Testing of the knowledge base is through assessed laboratory tasks, coursework and examinations as well as evidence supplied by the training portfolios. Assessment methods are specified in each module guide and are varied and designed to test the learning outcomes.

B Intellectual Skills

B Intellectual Skills	**Teaching/learning methods and strategies**
The ability to… 1. Actively question and seek information 2. Compare and contrast information from different sources 3. Critically evaluate information against hypotheses in a range of research scenarios 4. Actively analyse and apply problem-solving strategies 5. Demonstrate independent and self-directed learning	Intellectual skills are developed through student-centred learning and reflection, written assignments, practical work, data handling and interpretation, tutorial and seminar work. The research project is designed to permit students to demonstrate achievement of all the learning outcomes 1-5. **Assessment** A variety of assessment methods are employed. Some test a learner's ability to demonstrate skills 1-5 through examinations, but assessment of the training portfolios, coursework and practical project work including student oral presentation is the main vehicle for assessment of higher order skills.

C Subject, Professional and Practical Skills

C Subject/Professional/Practical Skills	**Teaching/learning methods and strategies**
The ability to… 1. Understand the importance of patient centred care, evidence based practice, clinical audit and multidisciplinary team working 2. Critically observe, analyse and evaluate information arising from a wide range of sources. 3. Apply practical approaches to the study of selective aspects of healthcare science and demonstrate an awareness of safety and good laboratory practice. 4. Communicate effectively scientifc data and concepts using a range of communication strategies. 5. Develop discipline-specific interests by specialising within the programme in relation to subject and/or career aspirations. 6. Obtain, record, collate and critically analyse data using appropriate laboratory techniques, working as an individual or within a group. 7. 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.	Skill 1 is acquired within professionally related modules in particular Studies in Biology of Disease, Interprofessional Practice and the Professional Practice modules. Skills 2-6 are acquired and developed in a coordinated and progressive way throughout the levels of the programme through lectures, tutorials, case studies, practical and project work. At level 1 attention is focussed on the acquisition of basic skills and safe working practices through prescribed exercises, while at level 2 more advanced techniques and open ended practical work are introduced. Professional skills are acquired through placement in an accredited NHS training laboratory throughout the programme. The research project is pivotal to the acquisition and consolidation of skills 2-7 and is supported by research methods and data analysis modules at levels 1 and 2. **Assessment** Skill 1 is primarily assessed though case studies, reflective practice and the training manual whilst skills 2, 3, 4 5 and 6 are primarily assessed through practical reports, coursework and research projects – proposal, oral presentation and report. Professional Practice skills are further assessed through the training portfolios. Additionally, skill 7 is assessed in the research project.

D Transferable Skills and other attributes

D Transferable skills and other attributes	**Teaching/learning methods and strategies**
The ability to… 1. Communicate information, advice, instruction and professional opinion to colleagues, patients, clients, users, their relatives and carers. 2. Critically 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. Work effectively as a team member. 7. Demonstrate an autonomous and reflective approach to lifelong learning.	Skills are developed throughout the programme via case studies, practicals, tutorials coursework assignments, the Graduate Development Programme and the placements in accredited NHS laboratories. **Assessment** A range of assessment strategies are used including essay, practical report, group work, case study, oral presentation, literature review and critique, reflection and self-evaluation, as well as the research project and the training portfolios.

Section 4: Programme structure

Programme Title: BSc (Hons) Healthcare Science (Life Sciences)

Level 1: All Pathways – Full Time Route

Intro to Biology of Disease **USSJKT-20-1**	Human Anatomy & Physiology **USSJJL-20-1**	Cell Biology & Biochemistry **USSJJM-20-1**	Scientific & Analytical Skills **USSJR6-20-1**	Genetics & Evolution **USSJJN-20-1**	Intro to Microbiology **USSJSF-20-1**

Level 1: All Pathways – Part Time Route

Intro to Biology of Disease **USSJKT-20-1**	Cell Biology & Biochemistry **USSJJM-20-1**	Genetics & Evolution **USSJJN-20-1**	Intro to Microbiology **USSJSF-20-1**	Concurrent Experiential Learning **USSJNE-40-1**

Interim award: **Certificate of Higher Education** 120 credits

Level 2: Blood, Genetic & Tissue Science Pathways

Human Physiology **USSJ4F-20-2**	Experimental Design & Analysis **USSJ4D-20-2**	Immunology & Disease **USSJ4E-20-2**	Studies in the Biology of Disease **USSJV6-20-2**	Applied Genetics **USSJ4Y-20-2**	Inter-professional Practice A **UZYSFD-20-2**

Level 2: Infection Science Pathway

Human Physiology **USSJ4F-20-2**	Experimental Design & Analysis **USSJ4D-20-2**	Immunology & Disease **USSJ4E-20-2**	Studies in the Biology of Disease **USSJV6-20-2**	Biology of Micro Organisms **USSJ4G-20-2**	Inter-professional Practice A **UZYSFD-20-2**

Interim award: **Diploma of Higher Education** 240 credits

Level 3: Life Sciences (Blood Science)

Healthcare Project	Professional Practice for Health Care Science	Haematology and Transfusion	Clinical Biochemistry	Immunology
USSJSJ-30-3	**USSJSK-30-3**	**USSJJT-20-3**	**USSJ5E-20-3**	**USSJ5D-20-3**

Level 3: Life Sciences (Genetic Science)

Healthcare Project	Professional Practice for Health Care Science	Cancer Biology & Genetics	Applied Genomics	Medical Genetics
USSJSJ-30-3	**USSJSK-30-3**	**USSJJU-20-3**	**USSJJV-20-3**	**USSJ5V-20-3**

Level 3: Life Sciences (Infection Science)

Healthcare Project	Professional Practice for Health Care Science	Medical Microbiology	Antimicrobial Agents	Immunology
USSJSJ-30-3	**USSJSK-30-3**	**USSJN3-20-3**	**USSJ5S-20-3**	**USSJ5D-20-3**

Level 3: Life Sciences (Tissue Science)

Healthcare Project	Professional Practice for Health Care Science	Cellular Pathology	Reproductive Sciences	Pathophysiology of Brain & Body
USSJSJ-30-3	**USSJSK-30-3**	**USSJ5F-20-3**	**USSJSB-20-3**	**USSJJQ-20-3**

Degree with Honours 360 credits

Compulsory

ENTRY
↓

level 1	**Compulsory modules (all pathways)** **Full time and part time route** • USSJKT-20-1 Intro to Biology of Disease • USSJSF-20-1 Intro to Microbiology • USSJJN-20-1Genetics and Evolution • USSJJM-20-1 Cell Biology and Biochemistry **Full time route** • USSJR6-20-1 Scientific and Analytical Skills • USSJJL-20-1 Human Anatomy and Physiology **Part time route** • USSJNE-40-1 Concurrent Experiential Learning	**Compulsory modules (specific pathways)** • none	**Interim Award:** **Cert HE Healthcare Science** • Credit requirements: 120 (not less than 100 at Level 1 or above)
level 2	**Compulsory modules (all pathways)** • USSJ4F-20-2 Human Physiology • USSJ4D-20-2 Experimental Design & Analysis • USSJV6-20-2 Studies in the Biology of Disease • USSJ4E-20-2 Immunology & Disease • UZYSFE-20-2 Inter-Professional Practice A	**Compulsory modules (specific pathways)** **Students on the Blood, Genetic & Tissue Science pathways must also take** • USSJ4Y-20-2 Applied Genetics **Students on the Infection Science pathway must also take** • USSJ4G-20-2 Biology of Micro Organisms	**Interim Award:** **Dip HE Healthcare Science** • Credit requirements: 240 (not less than 100 at Level 2 or above, and 120 at Level 1 or above)
level 3	**Compulsory modules (all pathways)** • USSJSJ-30-3 Healthcare Project	**Compulsory modules (specific pathways)** **Students on the Blood Science pathway must also**	**Interim Award:** BSc Healthcare Science **Credit requirements** 300 credits, at level 0 or above of which not less than 280 are at

	• USSJSK-30-3 Professional Practice for Healthcare Science	**take** • USSJJT-20-3 Haematology and Transfusion • USSJ5E-20-3 Clinical Biochemistry • USSJ5D-20-3 Immunology **Students on the Genetic Science pathway must also take** • USSJJU-20-3 Cancer Biology and Genetics • USSJ5V-20-3 Medical Genetics • USSJJV-20-3 Applied Genomics **Students on the Infection Science pathway must also take** • USSJN3-20-3 Medical Microbiology • USSJ5S-20-3 Antimicrobial Agents • USSJ5D-20-3 Immunology **Students on the Tissue Science pathway must also take** • USSJ5F-20-3 Cellular Pathology • USSJJQ-20-3 Pathophysiology of Brain and Body • USSJSB-20-3 Reproductive Science	level 1 or above, not less than 60 are at level 2 or above and not less than 60 are at level 3 or above. **Target/Highest Award:** BSc (Hons) Healthcare Science (Life Sciences) **Credit requirements** 360 credits at level 0 or above of which not less than 340 are at level 1 or above, not less than 200 are at level 2 or above and not less than 100 at level 3 or above.

→ **GRADUATION**

Section 5: Entry requirements

Admission into the Healthcare Science Programme will be administered within the Undergraduate Programmes in the Faculty of Health & Life Sciences.

Successful application to the Programme must meet one of the following minimum requirements

5 GCSEs at grade C or above including English Language, Mathematics and Double Science/Additional science or equivalent

PLUS
Tariff points as appropriate for the year of entry **(refer to the UWE website)* must include Chemistry and/or Biology
OR
Access Diploma: **(refer to UWE website for requirements)**
OR
European Baccalaureate 68-72 ***must include*** Science

*Non standard entry applicants may be considered with a lower tariff point on individual merit.

Applicants whose first language is not English must have a minimum IELTS score of 7 overall with a minimum of 6.5 in any section, (or equivalent).

All applicants must meet the following additional criteria:

Health checks and criminal record bureau checks will be undertaken on all candidates in accordance with university, faculty, and programme policies.
Applicants meeting the entry criteria may be invited for interview to assess suitability for acceptance on to the programme.

Section 6: Assessment Regulations

Approved to University Academic Regulations and Procedures

In order to be eligible to apply for HPC Registration a student must graduate with a BSc (Hons) Healthcare Science (Life Sciences) award.

No aegrotat ward with registration is available

The programme will have at least one external examiner appointed who is appropriately experienced and qualified and is from the relevant part of the HPC register.

Section 7: Student learning: distinctive features and support

The programme is unique in that work-based learning is fully integrated into the three-year programme, rather than being concentrated within an additional, sandwich placement year. Furthermore, the credit associated with work-based learning represents a significant proportion of the total credit for the course.

A suite of core modules in the first year provide students with the underpinning knowledge of anatomy, physiology, pharmacology, pathology, biochemistry, immunology, epidemiology, genetics, microbiology required for study in any of the Life Science pathways of Healthcare Science. The first year also includes an experiential placement in a local healthcare science setting, to introduce Healthcare Science in practice and give the student a wide appreciation of the four pathways available within the Healthcare Science (Life Science) programme.

Students who are employed in hospital laboratories may study the programme on a part time basis. In the first year they have the option of taking a 40-credit Concurrent Experiential Learning module which recognises the learning they are gaining in the work place enabling them to complete level-1 in one academic year.

The number of students recruited onto the full-time route will have been determined by the total number of placements available to us through the Workforce Development Groups. Within this total number students will know the breakdown of Blood, Genetic, Infection and Tissue Science placements available and their first year learning experience at university and on placement will enable them to consider which divisions interest them. Interviews will be held as part of the allocation process for their subsequent study.

In the Second Year, all students study a suite of healthcare science and research skills modules to underpin their practice during the 15-week long placement within their chosen pathway of the Life Sciences. This provides the student with practical experience of working in laboratory medicine and the opportunity to consolidate their learning and to enhance their professional skills within the workplace. They are also able to undertake preparatory work for their final year project within their work environment. In the final year, students further develop their specialist knowledge by studying Life Science modules specific to their chosen pathway prior to and during their final placement.

This integrated approach permits the development of expertise in applied scientific techniques within a discipline/pathway, enabling the graduate to work in a range of healthcare settings within a defined role in the delivery and reporting of quality-assured tests, investigations and interventions on patients or samples. Students will be introduced to a range of analytical equipment through the use of skills laboratories in the university, with the placements concentrating on the application to clinical practice.

Whilst students are on clinical placement, a visiting tutor makes regular, planned visits to provide support and to liaise with supervisors and assessors. In addition, effective placement learning is fully supported through a variety of web-based approaches, for example Blackboard (UWE's Virtual Learning Environment) and the Department's web based Profile system used to evidence validate and assess learning within the Professional Practice Module.

There is an overarching SHA Learning Development Agreement between the university and hospital trusts which supports placement arrangements. In addition the obligations and responsibilities of the student, the laboratory training officer/supervisor and the University are clearly set out in a personal Learning Agreement drawn up between all three parties. This emphasises and encourages the student to take responsibility for the attainment of the learning outcomes.

Students are supported during their time at UWE by academic tutors, their programme leader and student advisers. The 'Graduate Development Programme' is a university-wide learning opportunity for students to support their learning, to offer guidance for their Personal Development Planning, and to enhance their employability. Students will meet programme-specific tutors on a regular basis throughout the course. Whilst on placement students are supported by Laboratory Training Officers with constant liaison with Visiting Tutors through Profile. For all students, access to academic staff and student advisors is by student e-mail or by personal access, and the University's Centre for Student Affairs (CSA) provides support and guidance to students on a wide range of issues.

The libraries at Frenchay and Glenside campuses provide an extensive range of literature for the programme. Students have 24-hour access to computers, and IT support services are available within the Department of Applied Sciences and from the University's Computing Helpdesk.

The Department has a well-equipped range of general laboratories, specialised scientific

equipment and specialist facilities appropriate for teaching and research in biosciences and biomedicine. Support for laboratory-based scientific inquiry is enhanced by the research methods modules that occur within each year. Students develop a range of key skills required of a healthcare scientist, including critical review, research methodology, problem-solving, and IT and communication skills.

A Student Handbook is provided, during Induction to year 1, which includes information on the Department, the University, its regulations and procedures. Subsequently, at each level, 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 also produced. Detailed information is distributed in guides at the start of each module.

Professional Accreditation
Healthcare Science is accredited by Medical Education England, The Institute of Biomedical Science and the Health Professions Council.

Section 8 Reference points/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 Applied Sciences and the undergraduate programme in Healthcare Science (Life Sciences) are entirely consistent with this and are firmly set within this context.

- **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 modules at level one and level two have been considered to be consistent with the award of a Certificate in Higher Education and a Diploma in Higher Education, respectively. Graduates of the award will have acquired the knowledge and understanding, and gained the intellectual, subject, professional, practical and transferable skills listed in Section 3.

- **Subject benchmarks**

Biomedical Science - The BSc (Hons) Healthcare Science (Life Sciences) programme is consistent with the Biomedical Science benchmark with a multi-disciplinary approach. At level 1 modules provide a foundation of generic Healthcare Science and specific Life Science division content including scientific and analytical skills, biology of disease, biochemistry, microbiology, and genetics. By the end of level 2 students have increased the proportion of discipline-specific knowledge, placement practice, and blended learning. In the final year, the diet of modules is designed to provide the in-depth, specialist knowledge required for Genetic Sciences, Blood Sciences, Infection Sciences, or Tissue Sciences pathways.
Students gain an appreciation of biomedical science (BMS) 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 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.

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 Healthcare Science. The following statement is relevant to this programme: "Studies in the biosciences encourage an understanding of multidisciplinarity, an enquiring attitude and an appreciation of complexity. They require development of competence in team and individual working as well as in numeracy (often including information technology, statistics and bioinformatics). 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 through a range of modules within this programme.
The benchmark typical standard includes students being able to: "critically recount the interactions of structure and metabolic function at cellular and organism levels"; "describe and critically evaluate the evidence for the mechanisms of life processes"; "interpret the significance of internal and external influences on the integration of metabolism for survival and health", "describe and analyse patterns of inheritance and complex genetic interactions"; and "critically assess the contribution of 'behaviour patterns' to survival and success", which likewise map to compulsory modules within this programme.

- **Health Professions Council Standards**

The BSc (Hons) Healthcare Science (Life Sciences) programme is consistent with the Health Professions Council standards, in particular:-

- Health Professions Council (2009) *Standards of Education and Training*
- Health Professions Council (2007) *Standards of Proficiency for Biomedical Scientists*
- Health Professions Council (2008) *Standards of Conduct, Performance, and Ethics*

- **University 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 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 RAE, 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. 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.

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 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.

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. These are available on the University Intranet.

Programme monitoring and review may lead to changes to approved programmes. There may be a time lag between approval of such changes/modifications and their incorporation into an authorised programme specification. Enquiries about any recent changes to the programme made since this specification was authorised should be made to the relevant Faculty Academic Registrar.