

## Programme Specification

### Section 1: Basic Data

<b>Awarding institution/body</b>	University of the West of England, Bristol
<b>Teaching institution</b>	University of the West of England, Bristol
<b>School responsible for programme</b>	School of Life Sciences
<b>Programme accredited by</b>	
<b>Highest award title</b>	MSc Biomedical Sciences Programme which includes the awards  MSc Biomedical Sciences MSc Medical Microbiology MSc Immunology MSc Haematology MSc Cellular Pathology MSc Clinical Chemistry
<b>Default award title</b>	
<b>Interim award title</b>	PGDip Biomedical Sciences PGDip Medical Microbiology PGDip Immunology PGDip Haematology PGDip Cellular Pathology PGDip Clinical Chemistry
<b>Modular Scheme title (if different)</b>	
<b>UCAS code (or other coding system if relevant)</b>	C98E12; C98B12; C98F12; C98D12; C98C12; C98A12 (respectively)
<b>Relevant QAA subject benchmarking group(s)</b>	N/A
<b>On-going/valid until* (*delete as appropriate/insert end date)</b>	
<b>Valid from (insert date if appropriate)</b>	
<b>Authorised by...</b>	<b>Date:...</b>
<b>Version Code: 3 (summer 2009)</b>	

## Section 2: Educational aims of the programme

- To provide opportunities for postgraduate students from a range of biological and biomedical backgrounds to develop and realise their potential in a supportive and responsive environment
- To add value for learners in their specialised subject specific knowledge and transferable skills
- To offer a coherent and flexible programme of study at postgraduate level, with a variety of attendance modes
- To provide programme responsive to feedback from students, external examiners and other stakeholders as part of a culture of continuous quality management and enhancement
- To provide appropriate facilities and resources to deliver a quality teaching and learning experience for students.

## 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:

1. demonstrate a broad knowledge base with specific areas of deeper understanding relevant to Biomedical Sciences with a range of transferable skills
2. The contribution of research and scholarship in Biomedical Sciences.
3. demonstrate an advanced level of subject knowledge and understanding
4. Research and research practice that has the potential for dissemination to the wider scientific community

#### Teaching/learning methods and strategies:

##### Teaching/learning methods and strategies:

Acquisition of 1 is through lectures, tutorials, student-led seminars and poster presentations. External expert lecturers provide specialist subject lectures.

Additional support is provided through specifically designed distance learning material undertaken via UWEonline.

Acquisition of 2, 3 and 4 is through specialist subject lectures and tutorials in addition to the Research Project.

Throughout, the learner undertakes 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 coursework, through oral and poster presentation and through tasks undertaken under examination conditions (1-3). In addition assessed project proposal, project report and oral viva examination (4). All modules include a controlled conditions assessment

## B Intellectual Skills

<p><b>B Intellectual Skills</b></p> <ol style="list-style-type: none"><li>1. development of their conceptual, cognitive and analytical skills to M level.</li><li>2. use of appropriate information technology to seek and analyse information</li><li>3. demonstration of independent and self-directed learning</li></ol>	<p><b>Teaching/learning methods and strategies</b></p> <p>Intellectual skills are developed through core and specialist subject tutorial groups and assessed seminars. The research project develops all aspects of intellectual skills.</p> <p>Throughout, the learner undertakes independent reading both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject.</p> <p><b>Assessment</b></p> <p>A variety of assessment methods are employed. All test a learner's ability to demonstrate skills (1-3) through research critiques, student oral presentations, project proposal and final report. In addition specialist subject examination assesses skills 1 &amp; 3.</p>
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### C Subject, Professional and Practical Skills

<p><b>C Subject/Professional/Practical Skills</b></p> <ol style="list-style-type: none"> <li>1) develop as independent researchers</li> <li>2) demonstrate an understanding of the research process through execution of a research project</li> <li>3) develop their specific interests by specialising within their awards in relation to their subject or career aspirations</li> <li>4) critically evaluate information from a range of sources relevant to Biomedical Sciences.</li> <li>5) apply practical approaches to the study of selected aspects of biomedicine and demonstrate an awareness of safety and good laboratory practices</li> </ol>	<p><b>Teaching/learning methods and strategies</b></p> <p>Acquisition of 1,2,4 &amp; 5 are through the Research Project in addition to tutorials with project supervisors. Research Methods lectures also support the Project. Skills 3 &amp; 4 are acquired through lectures, tutorials and oral seminars.</p> <p>Throughout, the learner undertakes independent reading both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject</p> <p><b>Assessment</b></p> <p>Skills 1, 2, 4 &amp; 5 are primarily assessed through the Project proposal and Project report.</p> <p>Additionally, skills 3 &amp; 4 are assessed through essays, oral seminars and examination.</p>
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### D Transferable Skills and other attributes

<p><b>D Transferable skills and other attributes</b></p> <ol style="list-style-type: none"> <li>1) communicate effectively using a variety of methods</li> <li>2) critically analyse data arising from various means of biological inquiry</li> </ol>	<p><b>Teaching/learning methods and strategies</b></p> <p>Skills 1 and 2 are developed throughout all the core and specialist modules, particularly during tutorial sessions. Different assessment strategies also enable development of these key skills. Research Methods is a core module which specifically develops analytical skills for use in the Research Project.</p> <p><b>Assessment</b></p> <p>A range of assessment strategies are utilised (skills 1 &amp; 2) including essay, concise abstract summary, research critique, poster presentation, oral seminar and research project. Research Methods in particular assesses analytical skills involved with biological and statistical inquiry.</p>
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## Section 4: Programme structure

### ENTRY - FULL-TIME ROUTE

#### Core modules

Current Issues in Biomedical Research (USSJ6M-10-M)

Biomedical Aspects of Ageing (USSJ6B-10-M)

Methods in Clinical Analysis (USSJ5Y-20-M)

Research Methods (USSJ6K-20-M)

Research Project (USSJ6C-60-M)

#### Specialist Subject Optional modules One from

Applied Immunology A (USSJ5W-30-M)

Applied Immunology B (USSJ5X-30-M)

Cellular Pathology A (USSJ66-30-M)

Cellular Pathology B (USSJ67-30-M)

Haematology A (USSJ6L-30-M)

Haematology B (USSJ6N-30-M)

Clinical Chemistry A (USSJ64-30-M)

Clinical Chemistry B (USSJ65-30-M)

Medical Microbiology A (USSJ68-30-M)

Medical Microbiology B (USSJ69-30-M)

A&B modules run in alternate years

Plus

#### Optional modules One from

Cellular Pathology (USSJ6F-30-M)

Clinical Biochemistry (USSJ6E-30-M)

Haematology & Transfusion (USSJNC-30-M)

Medical Microbiology (USSJN5-30-M)

Applied Immunology (USSJ6A-30-M)

Applied Genomics (USSJXX-30-M)

#### Interim Awards

##### Credit requirements:

PGCert Biomedical Sciences (60 credits)

PGDip Biomedical Sciences (120 credits)

PGDip Named Award (120 credits – 60 from named specialism)

##### Other requirements:

Both interim awards must include successful completion of specialist subject modules  
PGCert -1 specialist subject module

PGDip BMS - 2 specialist subject modules in different disciplines)

PGDip Named Award – 2 matched specialist subject modules

#### Awards

MSc Biomedical Sciences or MSc named award (180 credits)

## ENTRY - PART-TIME ROUTE

Year One	Year Two	Year 3
<p><b>Core modules</b> Case Issues in Biomedical Research (USSJ6M-10-M)</p> <p>Methods in Clinical Analysis (USSJ5Y-20-M)</p>	<p><b>Core modules</b> Biomedical Aspects of Ageing (USSJ6B-10-M)</p> <p>Research Methods (USSJ6K-20-M)</p>	<p><b>Core modules</b> Research Project (USSJ6C-60-M)</p>
<p><b>Optional modules</b> One from</p> <p>Applied Immunology A (USSJ5W-30-M)</p> <p>Applied Immunology B (USSJ5X-30-M)</p> <p>Cellular Pathology A (USSJ66-30-M)</p> <p>Cellular Pathology B (USSJ67-30-M)</p> <p>Haematology A (USSJ6L-30-M)</p> <p>Haematology B (USSJ6N-30-M)</p> <p>Clinical Chemistry A (USSJ64-30-M)</p> <p>Clinical Chemistry B (USSJ65-30-M)</p> <p>Medical Microbiology A (USSJ68-30-M)</p> <p>Medical Microbiology B (USSJ69-30-M)</p> <p>A&amp;B modules run in alternate years</p>	<p><b>Optional modules</b> One from – (excluding that taken in first year)</p> <p>Applied Immunology A (USSJ5W-30-M)</p> <p>Applied Immunology B (USSJ5X-30-M)</p> <p>Cellular Pathology A (USSJ66-30-M)</p> <p>Cellular Pathology B (USSJ67-30-M)</p> <p>Haematology A (USSJ6L-30-M)</p> <p>Haematology B (USSJ6N-30-M)</p> <p>Clinical Chemistry A (USSJ64-30-M)</p> <p>Clinical Chemistry B (USSJ65-30-M)</p> <p>Medical Microbiology A (USSJ68-30-M)</p> <p>Medical Microbiology B (USSJ69-30-M)</p> <p>A&amp;B modules run in alternate years</p>	
<p>Can exit with PGCert Biomedical Sciences (60 credits – to include 30 from a specialist subject)</p>	<p>Can exit with PGDip Biomedical Sciences (120 credits – to include 60 from 2 specialist subject modules, or PGDip named award with 60 credits from one specialist subject)</p>	<p><b>Awards</b></p> <p>MSc Biomedical Sciences or MSc named award (180 credits)</p>

## Section 5: Entry requirements

Applicants will normally possess one of the following:

- An honours degree from a UK University or Institute of Higher Education, at the level of a lower second or above in a relevant subject with a significant biomedical, biological or biochemical content related to the Specialist Subject(s) to be studied.
- Such other qualifications and experience deemed equivalent by the Programme team in subject content and level of attainment to any of the above.

## Section 6: Assessment Regulations

a) **MAR** - current MAR regulations 3.1

## Section 7: Student learning: distinctive features and support

The MSc Biomedical Sciences suite of programmes contains a combination of specialist subject modules, where the student is encouraged to study certain topics in depth, and core modules, where the student is required to examine the wider biomedical sciences and assess how the knowledge of their own discipline interlinks with others. Students also undertake a substantial piece of individual research that is supported by the Research Methods module which guides and develops them in the skills required to undertake the project.

Modules are delivered as a mixture of lectures, tutorials, and discussions. These are intended to stimulate and sustain students' interests by explaining and developing concepts and demonstrating inter-relationships rather than to impart large quantities of factual material. Factual material is provided by means of handouts and library references and use of the virtual learning environment UWE online. Students are expected and encouraged to engage in self-directed and independent learning.

Small tutorial groups meet on a regular basis. The students and the lecturer discuss conceptual and other problems that are normally identified by the students. Students with knowledge of a particular topic are expected to make a major contribution during these periods. Tutorials include material additional to that covered during lectures. This material allows the development of topics previously introduced in the lecture situation.

The nature of this element of the programme requires that there is considerable input from Biomedical Science practitioners working within specialist disciplines in the National Health Service and related sectors. We consider that this adds considerable expertise to the teaching team and ensures currency of our MSc awards within Biomedical Science. The experts involved in this programme are practising pathologists, physicians and senior research scientists.

The University's virtual learning environment (UWEonline) is available as a source of information for students whilst away from UWE, Bristol. It incorporates tutorials, activities and guided reading that augment the student-centred learning between blocks. This will also enable students to prepare for the next block therefore enhancing their learning experience at UWE. By incorporating distance-learning delivery in addition to lecture/tutorial contact it is anticipated that students will find a smooth transition from inter-block and block periods.

## Section 8 Reference points/benchmarks

- QAA Framework for Higher Education Qualifications

The MSc in Biomedical Sciences complies with the QAA Framework for Higher Education Qualifications in England, Wales and Northern Ireland (Jan 2001)

<http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp#executive>

The MSc Programme encompasses three possible award levels; the target award (that is the award on which students enrol) of MSc and the two interim awards (that the student can accept if they do not complete the full MSc) - PGCert Biomedical Science and PGDip Biomedical Science or named speciality. The PGCert Biomedical Science is awarded to individuals who have successfully completed 60 M level credits including a minimum of 30 credits from a specialist subject module. The PGDip Biomedical Science will mark the achievement of completing 120 M level credits including a minimum of 60 credits from a specialism for the named specialist route, or from two specialisms for the dual subject award. The MSc is awarded to individuals who acquire 180 M level credits which includes the project. Students with relevant postgraduate awards from other institutes may be able to apply for advanced entry subject to the Faculty's accreditation of prior learning procedures.

- **Subject benchmarks**  
N/A for postgraduate awards

- **University teaching and learning policies and staff research projects:**

The staff who support the programme come from the Schools of Biomedical Sciences and Biosciences and have specific expertise in their subject area appropriate to M level provision. The modules are strongly underpinned by the research expertise of the Programme team. The quality, management and enhancement (QME) of the provision rely upon staff development, including research. Staff development includes personal review via the appraisal and development scheme, in-house training and external fora. The Faculty earmarks some finance for 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 Award, which is recognised by the Higher Education Academy, formally the Institute for Learning and Teaching (ILT).

The Full-time students undertake their Projects within the Faculty research areas, including the newly refurbished Centre for Research in Biomedicine (CRIB) laboratory and the Bristol Genomics Research Institute (BGRI). All members of staff involved in project supervision within the MSc programmes are research active. The students are supervised by a research active member of staff, usually their specialist subject module leader, and become an integral part of the research group. The part-time students undertake their research studies within their own NHS laboratories. An appropriately qualified person within their place of work supervises the students, with added support coming from their specialist module leader at UWE, Bristol. The appropriateness of the supervisory support available external to UWE is assessed through the proposed supervisors curriculum vitae, submitted prior to student admission.

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 she/he 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 Administrator.