

PROGRAMME SPECIFICATION

Course record information

Name and level of final award:	MSc Applied Biomedical Science MSc Biomedical Sciences MSc Biomedical Sciences (Cancer Biology) MSc Biomedical Sciences (Cellular Pathology) MSc Biomedical Sciences (Clinical Biochemistry) MSc Biomedical Sciences (Haematology) MSc Biomedical Sciences (Immunology) MSc Biomedical Sciences (Medical Microbiology) MSc Medical Molecular Biology MSc Medical Molecular Biology (Bioinformatics)
	<p>The above awards are postgraduate degrees that are Bologna FQ-EHEA second cycle degree or diploma compatible.</p>
Name and level of intermediate awards:	Postgraduate Diploma Applied Biomedical Science Postgraduate Certificate Applied Biomedical Science
Awarding body/institution:	University of Westminster
Teaching Institution:	University of Westminster
Status of awarding body/institution:	Recognised Body
Location of delivery:	Cavendish Campus
Language of delivery and assessment:	English
Mode, length of study and normal starting month:	Full time (1 year) and part time (flexible)
QAA subject benchmarking group(s) :	
Professional statutory or regulatory body:	Institute of Biomedical Science (IBMS)
Date of course validation/review:	2014
Date of programme specification approval:	May 2014
Course Leader:	Dr. Ian Locke

Course URL: westminster.ac.uk/courses/postgraduate
Westminster Course Code:
JACS code:
UKPASS code:

Admissions requirements

There are standard minimum [entry requirements](#) for all undergraduate courses. Students are advised to check the standard requirements for the most up-to-date information.

For most courses a decision will be made on the basis of your application form alone. However, for some courses the selection process may include an interview to demonstrate your strengths in addition to any formal entry requirements.

More information can be found here: westminster.ac.uk/courses/postgraduate/how-to-apply

Aims of the course

This programme is intended to allow students to meet the requirements of the Institute of Biomedical Science (IBMS) for membership and part fulfil the standards of education and training of the Health Professions Council (HPC). To that end it aims to promote the students' knowledge of biological and medical sciences in order that they may analyse and understand the basis of human disease processes and diagnostic procedures in the contexts of diagnostic pathology, biomedical research and bio-industry laboratories.

The course aims to promote students' awareness of the impact of the advances in science and technology on diagnostic and research laboratory practice and enable them to function in, and/or relate to, the practical work undertaken in a variety of laboratory settings in biomedical sciences and develop transferable skills which will enhance the students' employment prospects.

Employment and further study opportunities

Today's organisations need graduates with both good degrees and skills relevant to the workplace, ie employability skills. The University of Westminster is committed to developing employable graduates by ensuring that:

- Career development skills are embedded in all courses
- Opportunities for part-time work, placements and work-related learning activities are widely available to students
- Staff continue to widen and strengthen the University's links with employers in all sectors, involving them in curriculum design and encouraging their participation in other aspects of the University's career education and guidance provision
- Staff are provided with up-to-date data on labour market trends and employers' requirements, which will inform the service delivered to students.

The course has been designed to meet the 'top-up' requirements of graduates who do not possess an IBMS accredited biomedical science degree but who wish to pursue a career in diagnostic pathology and eventually become registered as a Biomedical Scientist with the Health and Care Professions Council (HCPC). The course is designed to redress specific shortfalls of subject knowledge not previously studied to honours degree level as required by the IBMS and provide graduates with a range of knowledge and practical skills. Successful completion of the course, along with completion of the IBMS registration portfolio, will result in

the award of the IBMS certificate of competence allowing HCPC registration and the ability to practice as a Biomedical Scientist in the UK. As such graduates of this course may find employment in hospital, private, PHE or NHSBT laboratories as well as other routes open to Biomedical Science masters graduates such as academia, research institutes and the pharmaceutical and related industries. Part time students are normally employed in pathology laboratories and would take this course as a means to career progression.

Learning outcomes

Learning outcomes are statements on what successful students have achieved as the result of learning. These threshold statements of achievement and are linked to the knowledge, understanding and skills that a student will have gained on successfully completing a course.

Knowledge and understanding

By the end of their course of study, the successful student will be able to:

- demonstrate, through assessments, a detailed knowledge of specific areas of investigative pathology, namely medical microbiology, clinical chemistry, haematology, cellular pathology, immunology and molecular biology;
- assimilate and integrate this knowledge on disease processes and diagnostic procedures and apply it in the context of diagnostic pathology and biomedical research areas;
- demonstrate an understanding of the impact of advances in science and technology, for example automation and molecular procedures, on the major areas of biomedical sciences.
- critically evaluate and discuss the role of the different biomedical science disciplines in the investigation of human disease and therapy;
- develop competence, confidence and an integrated approach to the study and diagnosis of human disease

Specific skills

By the end of their course of study, the successful student will be able to:

- integrate theoretical and practical aspects of specific areas of investigative pathology, namely cellular pathology, clinical chemistry, haematology, clinical immunology and medical microbiology
- develop a range of skills used in the biomedical laboratory;
- independently design effective experiments and research strategies by conducting a research project; within a chosen area of biomedical science
- critically evaluate the pathogenesis, laboratory investigation and diagnosis of a range of human diseases and disorders;
- critically analyse and present data in the appropriate format and context;
- critically discuss experimental results in the light of current knowledge and propose future investigations.
- In conjunction with those already developed in previous studies, meet all the competencies documented in the Health and Care Professions Council (HCPC) Standards of Proficiency for Biomedical Scientists 3a.1.

Key transferable skills

By the end of their course of study, the successful student will be able to:

- work effectively with a group as a leader or member, to produce team seminars
- use a full range of learning resources in making literature searches via the library, PubMed, World Wide Web, University intranet, and in using on-line teaching material, word processors, spreadsheets, and databases;

- show self evaluation skills, reflecting on own and others' functioning via coursework feedback, project reports, critical reviews of scientific articles and peer evaluation;
- manage information effectively by competently undertaking research tasks and compiling reviews and discussion essays;
- show autonomy by acting as an independent and self-critical learner, managing requirements and undertaking research tasks with minimum guidance;
- communicate effectively by means of oral, written and poster presentations, using print and electronic resources, reporting information, ideas and actions clearly, autonomously and competently;
- demonstrate problem solving skills by interpreting data, designing and carrying out projects and experimental work, and making professional use of others where appropriate.

Master's degrees are awarded to students who have demonstrated:

- a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of research in Biomedical Science, and professional practice;
- a comprehensive understanding of techniques applicable to their own research or advanced scholarship;
- originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline;
- conceptual understanding that enables the student:
 - to evaluate critically current research and advanced scholarship in Biomedical Science
 - to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

Typically, holders of the qualification will be able to:

- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences;
- demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level;
- continue to advance their knowledge and understanding, and to develop new skills to a high level.

And all holders will have:

- the qualities and transferable skills necessary for employment requiring:
 - the exercise of initiative and personal responsibility
 - decision-making in complex and unpredictable situations
 - the independent learning ability required for continuing professional development.

Learning, teaching and assessment methods

Learning

The Course views the student as being at the centre of the learning process and students are expected to take responsibility for their own learning, pursuing knowledge through active engagement and further developing skills acquired by their previous study with learning resources provided.

Teaching

The Course itself utilises a variety of teaching methods and approaches, including a mixture

of formal lectures, practical sessions, tutorials (student-centred learning activities), poster presentations and oral presentations. These combined teaching approaches aim to improve both students' knowledge of the biomedical science disciplines, as well as helping to develop their critical faculties through an experiential approach. In addition, the key communication skills required by any professional scientist are developed throughout the course.

Teaching methods are flexible and will make use of a variety of media. Data projectors are present in all lecture and tutorial rooms attached to a fixed pc but with the option for lecturers to attach their own laptop if preferred. All rooms are also equipped with visualisers and whiteboards to allow a variety of interactive teaching styles. The University is also equipped with the Blackboard Virtual Learning Environment (VLE) which functions both at a course and modular level with every course and module having a dedicated Blackboard site all accessible from the user's homepage. Module Blackboard sites acts as a focal point for interaction between staff and students away from the classroom environment. They contain administrative and teaching content for the module, allow students to participate in learning activities and interact with staff and their peers in open discussion fora. Blackboard is also used to manage the online submission of coursework, plagiarism checking and return of student marks via the grade centre, improving the flexibility of student access and learning.

Assessment

Each module is designed to address specific learning outcomes and has its own aims using appropriate teaching, learning and assessment methods. Module assessment is frequently used on the basis of either 60% examination and 40% coursework, 50%/ 50% or in some cases 100% course work. Assessment methods are varied and include presentations, practical work, group work and reports.

Course structure

This section shows the core and option modules available as part of the course and their credit value. Full-time Postgraduate students study 180 credits per year.

Credit Level 7				
Module code	Module title	Status	UK credit	ECTS
<i>Any three of the option modules shown below</i>				
7BIOM008W	Cellular pathology	Option	20	10
7BIOM011W	Clinical chemistry	Option	20	10
7BIOM013W	Clinical immunology	Option	20	10
7BIOM017W	Haematology and transfusion science	Option	20	10
7BIOM024W	Medical microbiology	Option	20	10
Award of Postgraduate Certificate available				
Module code	Module title	Status	UK credit	ECTS
<i>Any further three of the option modules shown below</i>				
7BIOM008W	Cellular pathology	Option	20	10
7BIOM011W	Clinical chemistry	Option	20	10
7BIOM013W	Clinical immunology	Option	20	10
7BIOM017W	Haematology and transfusion science	Option	20	10
7BIOM024W	Medical microbiology	Option	20	10
7BIOM025W	Molecular and cellular therapeutics	Option	20	10
7BIOM029W	Molecular science and diagnostics	Option	20	10
7BIOM034W	Principles of molecular medicine	Option	20	10
Award of Postgraduate Diploma available				
Module code	Module title	Status	UK credit	ECTS
7BIOM033W	Postgraduate research methods	Core	20	10
7BIOM032W	Postgraduate project	Core	40	20
Award of MSc available				

Please note: Not all option modules will necessarily be offered in any one year.

Professional body accreditation

The course is accredited by the Institute of Biomedical Science (IBMS)

Academic regulations

The current Handbook of Academic Regulations is available at westminster.ac.uk/academic-regulations

How will you be supported in your studies?

Course Management

The management structure supporting the courses is as follows:

- The Course leader, responsible for day to day running and overall management of the course and development of the curriculum
- Dr Martin Parry, Head of Department, holds overall responsibility for the course, and for the other courses run by the Department of Biomedical Sciences within the Faculty of Science and Technology
- Prof Jane Lewis, Dean of Faculty, holds overall responsibility for the course and for other courses run by the Faculty of Science and Technology

The management structure is further supported by the Course Team. Its membership is as follows:

- Course Leader
- full-time staff teaching the course, including Module Leaders and representatives of all major subject areas
- visiting lecturers and outside advisors, where appropriate.

Course teams consider those aspects of the course not covered by the Course Committee such as timetabling, rooming and preparation and monitoring of examinations and assessments.

Academic Support

Upon arrival, an induction programme will introduce you to the staff responsible for the course, the campus on which you will be studying, the Library and IT facilities, additional support available and to your Faculty Registry Office. You will be provided with the Course Handbook, which provides detailed information about the course. Each course has a course leader or Director of Studies. All students enrolled on a full-time course and part time students registered for more than 60 credits a year have a personal tutor, who provides advice and guidance on academic matters. The University uses a Virtual Learning Environment called Blackboard where students access their course materials, and can communicate and collaborate with staff and other students

Learning Support

The Academic Learning Development Centre supports students in developing the skills required for higher education. As well as online resources in Blackboard, students have the opportunity to attend Study Skills workshops and one to one appointments.

Learning support includes four libraries, each holding a collection of resources related to the subjects taught at that site. Students¹ can search the entire library collection online through the Library Search service to find and reserve printed books, and access electronic resources (databases, e-journals, e-books). Students can choose to study in the libraries, which have areas for silent and group study, desktop computers, laptops for loan, photocopying and printing services. They can also choose from several computer rooms at each campus where desktop computers are available with the general and specialist software that supports the courses taught at their Faculty. Students can also securely connect their own laptops and mobile devices to the University wireless network.

¹ Students enrolled at Collaborative partners may have differing access due to licence agreements.

Support Services

The University of Westminster Student Affairs department provide advice and guidance on accommodation, financial and legal matters, personal counselling, health and disability issues, careers, specialist advice for international students and the chaplaincy providing multi-faith guidance. The University of Westminster Students' Union also provides a range of facilities to support students during their time at the University.

How do we ensure the quality of our courses and continuous improvement?

The course was initially approved by a University Validation Panel in 2014. The panel included internal peers from the University, academic(s) from another university and a representative from industry. This helps to ensure the comparability of the course to those offered in other universities and the relevance to employers.

The course is also monitored each year by the Faculty to ensure it is running effectively and that issues which might affect the student experience have been appropriately addressed. Staff will consider evidence about the course, including the outcomes from Course Committees, evidence of student progression and achievement and the reports from external examiners, to evaluate the effectiveness of the course. Each Faculty puts in to place an action plan. This may for example include making changes on the way the module is taught, assessed or even how the course is structured in order to improve the course, in such cases an approval process is in place.

A Course review takes place periodically to ensure that the curriculum is up-to-date and that the skills gained on the course continue to be relevant to employers. Students meet with review panels to provide feedback on their experiences. Student feedback from previous years e.g. from Course Committees is also part of the evidence used to assess how the course has been running.

How do we act on student feedback?

Student feedback is important to the University and student views are taken seriously. Student feedback is gathered in a variety of ways.

- Through Course Committees students have the opportunity to express their voice in the running of their course. Student representatives are elected to Committee to expressly represent the views of their peer. The University and the Students' Union work together to provide a full induction to the role of the student representatives.
- Each Faculty also has its own Faculty Student Forum with student representatives; this enables wider discussions across the Faculty. Student representatives are also represented on key Faculty and university committees.
- All students are invited to complete a questionnaire before the end of each module. The feedback from this will inform the module leader on the effectiveness of the module and highlight areas that could be enhanced.
- The University also has an annual Postgraduate Taught Experience Survey or PTES which helps us compare how we are doing with other institutions, to make changes that will improve what we do in future and to keep doing the things that you value.

Please note: This programme specification provides a concise summary of the main features of the course and the learning outcomes that a student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. This specification should be read in conjunction with the Course Handbook provided to students and Module Handbooks, which provide more detailed information on the specific learning outcomes, content, teaching, learning and assessment methods for each module.

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