

# Programme Specification: Biomedical Sciences BSc

## **Course record information**

| Name and level of final award                                    | <ul> <li>Bachelor of Science with Honours - Biomedical Sciences</li> <li>Bachelor of Science with Honours - Biomedical Sciences with Professional Experience</li> <li>Bachelor of Science with Honours - Biomedical Sciences with International Experience</li> <li>The award is Bologna FQ-EHEA first cycle degree or diploma compatible</li> </ul>  |  |  |
|--|---|--|--|
| Name and level of intermediate awards                            | Bachelor of Science (BSc) - Biological Sciences     Diploma of Higher Education (Dip HE) - Biological Sciences     Certificate of Higher Education (CertHE) - Biological Sciences   |  |  |
| Awarding body/institution  | University of Westminster   |  |  |
| Teaching institution   | University of Westminster   |  |  |
| Status of awarding body/institution                              | Recognised Body   |  |  |
| Location of delivery   | Primary: Central London   |  |  |
| Language of delivery and assessment                              | English   |  |  |
| QAA subject benchmarking group(s)                                | Biomedical Sciences <a href="https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/subject-benchmark-statement-biomedical-sciences.pdf?">https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statement-biomedical-sciences.pdf?</a> <a href="mailto:statement-biomedical-sciences.pdf">statement-biomedical-sciences.pdf</a> ? <a href="mailto:statement-biomedical-sciences.pdf">statement-biomedical-sciences.pdf</a> . |  |  |
| Professional statutory or regulatory body                        | Accredited by the Institute of Biomedical Science (IBMS) <a href="https://www.ibms.org/home/">https://www.ibms.org/home/</a> (Reaccreditation pending spring/ summer 2022)  Accredited by the Royal Society of Biology (RSB) <a href="https://www.rsb.org.uk/">https://www.rsb.org.uk/</a> (Reaccreditation pending spring/ summer 2022)  |  |  |
| Westminster course title, mode of attendance and standard length | <ul> <li>BSc Biomedical Sciences FT, Full-time, September start - 3 years standa length with an optional year abroad or placement</li> <li>BSc Biomedical Sciences PT, Part-time day/evening, September start - 6 years standard length with an optional year abroad or placement</li> </ul>  |  |  |
| Valid for cohorts  | From 2022/3   |  |  |

## 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: https://www.westminster.ac.uk/study/undergraduate/how-to-apply

## **Recognition of Prior Learning**

Applicants with prior certificated or experiential learning at the same level of the qualification for which they wish to apply are advised to visit the following page for further information:

https://www.westminster.ac.uk/current-students/guides-and-policies/student-matters/recognition-of-prior-learning

## Aims of the programme

The BSc (Hons) Biomedical sciences programme is designed for those with an interest in human health and disease with a focus on Diagnostic Pathology. This course is accredited by the Institute of Biomedical Science (IBMS) and therefore meets part of the requirements for an individual to register with the Health and Care Professions Council (HCPC) as a Biomedical Scientist.

Although specifically designed for those wishing to build a career in biomedical science, this degree is also accredited by the Royal Society of Biology and is suitable for anyone with a broader interest in human biology, who wishes to build a career in any bioscience related discipline. Our successful alumni have gone on to study medicine and work in a whole host of different areas, including scientific research, clinical trials and drug development, public health and infection control, food safety, government advisory, scientific and medical writing, teaching and many more.

This degree provides a strong foundation for a career in life sciences and supports the development of many graduate-level transferable skills.

The BSc (Hons) Biomedical Sciences course has been designed to:

- Provide students with a comprehensive, current and relevant programme of study, delivered in a rich learning
  environment that is inclusive, supportive and equitable, enabling and encouraging all students to achieve their
  individual potential without impediment.
- Meet the requirements of the Institute of Biomedical Science (IBMS) for membership and, in part, fulfil the standards of Proficiency for Registration with the Health and Care Professions Council (HCPC).
- Instil within its graduates continuing professional development as a fundamental attribute of academic and professional life. Develop transferable skills to enhance employability and postgraduate education prospects.
- Develop the students' knowledge of biological and medical sciences in order that they may analyse and understand
  the basis of human health and disease
- Ensure that graduates have the skills to apply their understanding of disease processes and diagnostic procedures in the contexts of diagnostic pathology, biomedical research, public health, and wider bio-industry.
- Enable students to relate to and function within the practical work undertaken in a variety of biomedical laboratory settings
- Produce graduates capable of carrying out scientific research and disseminating the results
- Enable students to contextualise scientific knowledge and opinion within a historical, geographical and cultural framework, referencing current expected standards of equality, diversity and inclusivity.
- Promote students' awareness of the impact that global advances in science and technology have upon diagnostic
  and research laboratory practice. Give them an understanding of the importance of treating all individuals and
  cultures with respect, acknowledging the harm that has resulted from not doing so. With this knowledge our
  graduates will be responsible and compassionate members of different communities, both local and global.
- Include the flexibility to allow students to undertake a work placement or international study experience whilst studying for their degree and gain recognition of that experience through specific award titles.

# **Employment and further study opportunities**

University of Westminster graduates will be able to demonstrate the following five Graduate Attributes:

- · Critical and creative thinkers
- · Literate and effective communicator
- Entrepreneurial
- · Global in outlook and engaged in communities
- · Social, ethically and environmentally aware

University of Westminster courses capitalise on the benefits that London as a global city and as a major creative, intellectual and technology hub has to offer for the learning environment and experience of our students.

The development of these graduate attributes is oriented towards employability upon completion of the course and these five attributes are aligned to various Course Learning Outcomes as shown in the table later in this document.

Whilst graduate attributes are acquired through a number of different modules throughout your course, all courses in the School of Life Sciences also have an integrated framework of employability skills and options running from level 4 up to level 6. This framework is intended to enable students to develop key skills which will prepare them for employment and/or further study following graduation. The specific modules for implementing this framework are Professional Development in Science (Level 4), Research Methods (level 5) and the Life Sciences Final Year Project (level 6). Along with subject specific knowledge and skills however, other modules in the course also incorporate Key Transferable Skills, which complement the employability skills in this framework and are applicable to a wide range of future careers, further study and many other activities. The key employability related skills students will develop through the course include subject specific skill applicable to the many branches of the life sciences and skills that are transferrable to a variety of scenarios. These include: the ability to critically analyse scientific literature and to discuss and correctly cite those sources; gaining competence in laboratory and other practical/investigative techniques relevant to your specialism; the ability to process, analyse, interpret and present a variety of data types including the appropriate statistical analysis of that data using a variety of software packages including Microsoft office and dedicated statistical analysis software such as SPSS; teamworking and leadership skills from group work in practical classes/ workshops and group presentation tasks; presentations skills in a variety of formats (e.g. posters, oral presentations, infographics). The School of Life Sciences has well equipped teaching laboratories with access to modern diagnostic platforms allowing Biomedical Sciences students to experience and develop techniques and practices from the different disciplines of Biomedical Science from Cellular pathology to Medical Microbiology and Diagnostic Biochemistry to Haematology and Immunology. All students undertake a final year project which also allows the development of important skills such as experimental design based on available resources (including budget), planning of day-to-day activities and keeping records. Skills such as these are important for a wide variety of jobs and activities both within the life sciences and in the wider context.

Also built into our courses is the flexibility to allow students to undertake a work placement or international study experience between levels 5 and 6 of their studies which will further enhance your employability prospects. Students who undertake a work-based placement benefit from real world experience in their chosen discipline and gain a clearer understanding of options open to them following completion of their degree. The completion of a work placement in a relevant area is often looked upon favourably by employers as an indication of practical experience in the 'real world' and indeed many students receive job offers post-graduation from either their placement provider or similar employment within the sector. Whilst not necessarily related to a specific area of employment, completion of an international study period is also often looked upon favourably by employers as an indication of an international/ global mindset and independence, both of which are desirable characteristics in a connected world.

Should you elect to undertake a placement or international study period between levels 5 and 6, we would therefore encourage you to follow a path most appropriate to your personal career goals. Many students also amass a diverse range of professional experience at all levels of their course and are encouraged to integrate all such opportunities into their studies. Again, our location in London is a distinct advantage when looking for additional work experience. Our aim is to foster a culture of gathering expertise, building professional networks, and expanding academic learning with the knowledge and skills gained in working environments.

Graduates from Biomedical Sciences have a high employment rate and are sought by a wide range of employers. Major employment areas include diagnostic pathology and clinical laboratories, NHS Blood and Transplant laboratories, private pathology laboratories, Public Health England, veterinary and agricultural laboratories, clinical genetics laboratories, forensic laboratories, research laboratories in universities, government or charity-funded research organisations, research & development for the pharmaceutical, diagnostics, medical devices and laboratory instrumentation industries, clinical trials, regulatory affairs (drug registration and patents), commerce (sales and marketing) related to healthcare and diagnostics products. We also have a strong record in preparing graduates for postgraduate study across a range of biomedical and molecular disciplines, as well as postgraduate teacher training.

Graduate employment and opportunities in the biomedical sciences industries is constantly shifting, and graduates from this course have demonstrated their responsiveness to these changes. We regularly monitor graduate career destinations, and reflect on this information in the planning of the course curriculum.

## What will you be expected to achieve?

Learning outcomes are statements on what successful students have achieved as the result of learning. These are threshold statements of achievement the learning outcomes broadly fall into four categories:

- The overall knowledge and understanding you will gain from your course (KU)
- Graduate attributes are characteristics that you will have developed during the duration of your course (GA)
- Professional and personal practice learning outcomes are specific skills that you will be expected to have gained on successful completion of the course (PPP)
- Key transferable skills that you will be expected to have gained on successful completion of the course. (KTS)

## Level 4 course learning outcomes: upon completion of Level 4 you will be able to:

- CLO4.1 Evidence a broad understanding of concepts and terminology in biochemistry, molecular biology and genetics, including; structure and function of biomolecules, cellular metabolism, and the structure, function and regulation of genes. Communicate about how understanding in these areas and Bioscience in general can contribute to sustainable development goals for people and the planet now and in the future. ( KU GA )
- CLO4.2 Demonstrate a broad understanding of concepts and terminology with respect to; prokaryotic and eukaryotic cell biology and life cycles, biodiversity, natural selection and the evolution of organisms. ( KU GA )
- CLO4.3 Use correct terminology to demonstrate broad knowledge and understanding of the human body, its component parts and major systems, their structures, functions, and controls. ( KU GA )
- CLO4.4 Explain the need to establish and maintain a safe and legally compliant practice environment. Demonstrate
  awareness of governance and of key principles and processes necessary to do so, including relevant parts of; the
  Health and Safety at Work Act 1974, the Data Protection Act 2018, the Equality Act 2010, the Human Tissue Act
  2004 and the work of the Human Tissue Authority. The correct use of the International System of Units (SI), local
  quality assurance practice and processes, and external quality and competence standards. (KU GA)
- CLO4.5 Use standard laboratory techniques to safely work with laboratory equipment and reagents. Collect, assess
  and present simple experimental data, demonstrating expertise in basic numeracy and statistics skills. Evaluate
  your own strengths and weaknesses in the subjects studied to show professional development. ( KU GA PPP KTS )
- CLO4.6 Evidence knowledge and understanding of; safe sample handling, preparation, staining techniques and the use of microscopy to visualise biological structures. ( KU GA )
- CLO4.7 Increase your own knowledge base through the ability to assess the quality of information sources, access
  library resources, and appropriate online material and undertake simple research tasks. Demonstrate the ability to
  communicate using various written, oral and audio-visual methods, acknowledging academic standards,
  professional protocols and a range of audiences. (GA PPP KTS)
- CLO4.8 Effectively work with others on common tasks, demonstrate problem solving and time management skills.
   Evidence the ability to identify factors affecting team performance, recognise diversity and practice inclusion and an understanding of the need for self-reflection. Show an awareness of careers in Biosciences begin professional development practices to enhance employability. (KU GA PPP KTS)

#### Level 5 course learning outcomes: upon completion of Level 5 you will be able to:

- CLO5.1 Evidence detailed knowledge of microorganism biodiversity, host-pathogen interactions at molecular, organismal and population levels, body response mechanisms and how they affect human health. ( KU GA )
- CLO5.2 Evidence detailed understanding of the complex processes and events leading to human diseases and the principles of a system-led approach to the study of disease and its treatment. ( KU GA )
- CLO5.3 Demonstrate high level understanding of human genetics and patterns of inheritance. Outline methods of
  genetic testing and screening. Reflect upon best practice to capitalise upon diversity, support equality and
  inclusion, and acknowledge the ethical and social implications of current and historic scientific research and
  publication. In turn, appreciate the value of drawing upon diverse approaches and perspectives to achieve goals. (
  KU GA)
- CLO5.4 Demonstrate detailed knowledge of biochemical mechanisms involved in regulation of homeostasis; causes and consequences of metabolic disorders which affect human wellbeing. ( KU GA )
- CLO5.5 Practice effective and interactive working within a group to formulate approaches to the task in hand; problem solving, the ability to seek and recognise support and to be a proactive group member, particularly leadership. Take responsibility for own actions and reflect on and evaluate own work, and that of the group. (GA PPP)

- CLO5.6 Demonstrate the ability to devise and perform experiments to provide new information and support innovation, evaluate experimental methods for investigation in biomedical sciences, understand and deploy controls and select appropriate statistical methods. Use relevant software packages and evaluate their application to experimental data. (KU GA PPP)
- CLO5.7 Demonstrate effective management of your own learning strategy in the biomedical sciences, problem solving, making effective and critical use of the variety of resources available and ability to access and use the scientific literature, including electronic databases. (GA KTS)
- CLO5.8 Use your expertise to identify and retrieve high quality, relevant scientific or clinical information from the literature. Provide evidence of understanding by using this information to produce a literature review, add context to cases studies, or prepare similar scientific reports, also to identify areas where further research is needed. Cite the scientific literature according to accepted formats. (GA KTS)

#### Additional Year course learning outcomes: upon completion of Additional Year you will be able to:

- IEO.1 Enable personal development by devising a programme of international study that complements the content of the home degree programme and/or develops other interests. ( GA PPP KTS )
- IEO.2 Appreciate the challenges and opportunities of studying/ working in an international context. ( GA PPP KTS )
- IEO.3 Demonstrate an understanding of, and respect for, the cultural norms and differences of the host country at a societal level as part of an inclusive, global outlook ( GA PPP KTS )
- PEO.1 Reflect upon your greater knowledge of the career opportunities available to life sciences graduates in the job market and your personal aptitude for those opportunities. ( GA PPP KTS )
- PEO.2 Demonstrate the acquisition of a range of professional, practical and key-transferrable skills relevant to the fields of employment where life sciences graduates are valued. (KU GA PPP KTS)
- PEO.3 Take personal responsibility for directing your own learning and future career making the best use of the
  opportunities, experiences and people that were available to you during your placement year. Draw upon the
  diverse approaches, perspectives, knowledge and experience of a diverse workforce, treating all individuals with
  respect and recognising their contribution to the host organisation. (KU GA PPP KTS)

#### Level 6 course learning outcomes: upon completion of Level 6 you will be able to:

- CLO6.1 Demonstrate critical understanding of current technologies in sample preparation and microscopic examination of cells and tissues, including their gross structure, ultrastructure and changes occurring during disease. ( KU GA )
- CLO6.2 Demonstrate in depth understanding of current methods of isolation, identification, characterisation, diversity, and classification of human pathogens, including the impact of innovations in science and technology on global public health. ( KU GA )
- CLO6.3 Demonstrate critical understanding of the causes and consequences of diseases associated with abnormal immune function, and advances in immunological methods. ( KU GA )
- CLO6.4 Demonstrate critical understanding of different elements that constitute blood in normal and disease state, the principles of biochemical investigation used in the diagnosis, treatment and monitoring of disease. ( KU GA )
- CLO6.5 Successfully design, carry out and report on an independent project within an appropriate area. Recognise
  and reflect upon any ethical and social implications of current and historical scientific research and knowledge
  dissemination in that area. Deliver the project aims through timely delivery of strategic objectives. Record, analyse
  and interpret results, and disseminate the project outcomes and/or findings in a detailed and coherent way in a style
  appropriate to and respectful of the specified audience. (GA PPP KTS)
- CLO6.6 Demonstrate working knowledge of relevant, current UK legislation and International Standards that govern
  and affect pathology and biomedical laboratory practice, and the importance of maintaining confidentiality and
  obtaining valid consent. Use a multidisciplinary systematic approach and exercise professional judgement within
  the legal and ethical boundaries of the biomedical sciences. (KU GA PPP)
- CLO6.7 Identify and deploy methods/tools appropriate for interpreting results, including effective use of statistical and bioinformatics methods. Justify choices and suggest future directions based upon critical and authentic evaluation of performance. ( GA KTS )
- CLO6.8 Treat all individuals and cultures with respect and acknowledge the harm that results from not doing so.
   With this knowledge act as a responsible and compassionate member of different communities, both local and global. ( GA PPP )

# How will you learn?

#### Learning methods

The BSc Honours Biomedical Sciences course responds to the rapidly changing healthcare settings, meeting the demand for multi-skilled, IT literate, confident, globally aware professionals. Our teaching and Learning strategy is designed to produce bioscientists who demonstrate competency in a wide range of laboratory techniques and who work effectively in modern highly automated biomedical laboratories. The philosophy of the course is inherently interdisciplinary. We aim to provide a broad range of practical and conceptual knowledge and opportunities to learn and practice skills specific to the biomedical sciences, but also applicable to the wider workplace. We ensure that our students engage with the broader ethical and social contexts that affect us all, and support them in becoming effective communicators through diverse media for local and global audiences. The course builds not only knowledge and skills relevant to Biomedical Science but graduate attributes that support employability and workplace effectiveness.

The teaching and learning methods of the course are directly related to the aims and learning outcomes identified above. The course is designed to lead students through key theoretical concepts and broad understanding and basic skills across all course subjects, to focused knowledge, synoptic understanding and expert skills. Before Graduation we strongly encourage and support our students to identifying a biomedical science subject area of particular interest to them and we ensure that they are aware of the professional opportunities open to them for their future careers.

The School of Life Sciences is committed to the University of Westminster Equality, Diversity and Inclusion (EDI) policy with a local implementation based on three central elements:

- Our commitment is to ensure an inclusive, safe and supportive learning, working and social environment which
  enables scientific research and teaching to flourish and encourages our future scientists to growand realise their
  true potential.
- Our goal is to empower all students and staff to critically reflect on their understanding and positionality, with
  respect to the wide-ranging global scientific perspectives (past and present); encouraging the open debate of
  differing points of view.
- Our pledge is to respect and value our diverse Life Sciences community (within and beyond the University of Westminster) and foster an equitable culture as we move forward in the field.

These three elements inform and direct all of our learning, teaching and research activities and have been central to our course design process as can be seen in the learning outcomes at module and course level. All staff and students in the school of Life Sciences are expected to embrace and respect these values.

#### **Teaching methods**

A number of different teaching styles may be expected, according to the nature of the subject matter covered in the different modules. At Level 4, the modules provide core knowledge and skills across the biomedical sciences. Much of the Level 4 programme is common across the School's undergraduate module scheme. The module Professional Development in Science enables all Biomedical Sciences undergraduates to develop selected study and key skills that form a basis for continued personal and professional development in higher levels of the programme and beyond. General laboratory skills are embedded within core modules at Level 4 and 5 and in addition the Research methods module at Level 5 will prepares students for their final year project. In general modules are delivered using combinations of lectures, tutorials, workshops, laboratory and *in-silico* practical sessions. We practice with student-centred learning. We deliver learning material through a blended approach with a mixture of online and on-site activities

Course learning outcomes are not all delivered within the individual modules, rather the core modules as a group ensure the delivery of particular course learning outcomes. We also offer a range of option/elective modules at levels 4 & 5 to expand students skills and experience and enable them to explore the wider context of biomedical science. Module specific learning outcomes are listed in module proformas and published in the course handbook. The module proformas indicate which of the course level learning outcomes those modules contribute to.

We ensure that as high as possible a proportion of our teaching material is delivered in fully accessible ways and we support our students progress with a personal tutoring program and a full range of extracurricular opportunities. Students are encouraged to integrate theory with practice as they study. Our students receive continuous formative feedback through online activities, group and one-to-one tutorials and periodic reviews, designed to give multiple points of guidance throughout the programme and before any summative assessments. Core lectures and practicals in levels 4 & 5 (years 1 and 2) address the whole year group, whereas tutorials, workshops and seminars are generally undertaken in smaller groups. The final year project is supported through focused one-to-one tuition with a project supervisor.

We support our modules with online material through Blackboard, the University's Virtual Learning Environment. This material may include recorded lectures, videos, practical examples, computer-based exercises, technical support, key

references, discussion groups, and portfolios. The scheduled / supervised time represents only a proportion of study for each module (approximately one quarter overall). The remaining time is self-managed, offering scope for students to explore and develop their own best practice, ensuring the autonomy required in professional life.

#### Assessment methods

Our assessment strategy reflects the philosophy of the course, aiming to develop the creative, flexible and thoughtful scientists of the future. Assessment is integral to the overall learning process, and we offer a range of authentic assessment methods, allowing students to evidence their knowledge, skills and understanding in a variety of ways. This approach provides a range of activities in which to excel, so supporting and encouraging a variety of preferred learning styles. Assessment methods are varied and include practical work, essays, group work, presentations, in-class tests and reports. The 40 credit Level 6 Research Project is primarily assessed by written thesis.

Clear assessment criteria are stated in module documents, and these are linked to the module Learning Outcomes. Formative feedback is also given throughout modules in tutorials, group discussions, and in the laboratory practical sessions. It is designed to inform you of areas for improvement, and of current strengths which are to be nurtured and developed. Students receive formal feedback from all summative assessments, and this directly relates to the assessment criteria for each module. To support their development students are actively encouraged to engage with feedback and are given the opportunity to discuss their results and feedback with members of the teaching team or their personal tutor. Some assessment might be partly peer assessed (by groups of your fellow students, under staff supervision) to support students in developing skills in critical judgement and self/peer evaluation. Some formative assessment might assess learning outcomes from more than one teaching module (called 'synoptic assessment'). This allows students to combine elements of learning from different modules and practice using their accumulated knowledge and understanding of biomedical sciences theory and practice.

| Graduate Attribute                            | Evident in Course Outcomes  |
|---|---|
| Critical and creative thinker                 | CLO4.1, CLO4.5, CLO4.7, CLO5.3, CLO5.8, CLO6.1, CLO6.5, CLO6.7, IEO.1, PEO.2  |
| Literate and effective communicator           | CLO4.1, CLO4.2, CLO4.3, CLO4.6, CLO4.7, CLO4.8, CLO5.1, CLO5.2, CLO5.4, CLO5.5, CLO5.8, CLO6.3, CLO6.4, CLO6.5, CLO6.7, CLO6.8, IEO.3, PEO.2, PEO.3 |
| Entrepreneurial                               | CLO5.6, CLO5.7, CLO6.5  |
| Global in outlook and engaged in communities  | CLO4.1, CLO4.4, CLO4.8, CLO5.3, CLO6.2, CLO6.8, IEO.2, IEO.3, PEO.1, PEO.2, PEO.3   |
| Socially, ethically and environmentally aware | CLO4.1, CLO4.2, CLO4.4, CLO5.3, CLO6.6, IEO.2, IEO.3, PEO.2, PEO.3  |

#### **Course Structure**

This section shows the core and option modules available as part of the course and their credit value. Full-time Undergraduate students study 120 credits per year. Course structures can be subject to change each academic year following feedback from a variety of sources.

Modules are described as:

- Core modules are compulsory and must be undertaken by all students on the course.
- Option modules give you a choice of modules and are normally related to your subject area.
- **Electives**: are modules from across the either the whole University or your College. Such modules allow you to broaden your academic experience. For example, where electives are indicated you may choose to commence the study of a foreign language alongside your course modules (and take this through to the final year), thereby adding further value to your degree.
- Additional information may also be included above each level for example where you must choose one of two specific modules.

#### **Modules**

#### Level 4

| Module Code | Module Title                                | Status   | UK credit | ECTS |
|-------------|---|----------|-----------|------|
| 4BICH001W   | Biochemistry                                | Core     | 20        | 10   |
| 4BIOL002W   | Cell Biology                                | Core     | 20        | 10   |
| 4BIOM004W   | Functional Anatomy                          | Core     | 20        | 10   |
| 4PHYM001W   | Human Physiology                            | Core     | 20        | 10   |
| 4BIOM006W   | Professional Development in Science (PRoDS) | Core     | 20        | 10   |
| 4BIOL001W   | Applications of Biological Sciences         | Option   | 20        | 10   |
| 4BICH002W   | Biological Chemistry                        | Option   | 20        | 10   |
| 4PHYM002W   | Fundamentals of Pharmacology                | Option   | 20        | 10   |
| 4HMNT001W   | Principles of Human Nutrition               | Option   | 20        | 10   |
|             |   | Elective | 20        | 10   |

#### Level 5

| Module Code | Module Title                        | Status   | UK credit | ECTS |
|-------------|-------------------------------------|----------|-----------|------|
| 5BIOM007W   | Applied Pathobiology                | Core     | 20        | 10   |
| 5BIOM008W   | Infection and Immunity              | Core     | 20        | 10   |
| 5BIOM001W   | Medical Genetics and Genomics       | Core     | 20        | 10   |
| 5BICH001W   | Metabolic Biochemistry              | Core     | 20        | 10   |
| 5BIOM010W   | Research Methods                    | Core     | 20        | 10   |
| 5BICH002W   | Bioinformatics                      | Option   | 20        | 10   |
| 5HMNT001W   | Diet in Health and Disease          | Option   | 20        | 10   |
| 5BIOM002W   | Genetics in Medicine                | Option   | 20        | 10   |
| 5BIOM009W   | Human Parasitology                  | Option   | 20        | 10   |
| 5PHYM001W   | Medical Physiology                  | Option   | 20        | 10   |
| 5BIOM003W   | Molecular and Cellular Therapeutics | Option   | 20        | 10   |
| 5PHYM007W   | Neuroscience                        | Option   | 20        | 10   |
|             |                                     | Elective | 20        | 10   |

## **Additional Year**

Students must source their own year-long placement. The core level 4 'Professional Development in Science' will provide plenty of information and resources to support success. We will place links to advertisements for suitable positions on the 'Engage' platform and our employability team and personal tutors will provide guidance to those wishing to undertake a placement year.

| Module Code | Module Title  | Status | UK credit | ECTS |
|-------------|---|--------|-----------|------|
| 6BIOL005W   | Life Sciences International Study Module (year-long)      | Option | 120       | 60   |
| 6BIOM009W   | Life Sciences Work Experience Placement Module (yearlong) | Option | 120       | 60   |

## Level 6

There are no option modules at level 6

| Module Code | Module Title                              | Status | UK credit | ECTS |
|-------------|---|--------|-----------|------|
| 6BIOM002W   | Cellular and Molecular Pathology          | Core   | 20        | 10   |
| 6BIOM003W   | Clinical Immunology and Immunohaematology | Core   | 20        | 10   |
| 6BIOM004W   | Diagnostic Biochemistry and Haematology   | Core   | 20        | 10   |
| 6BICH003W   | Final Year Project in Life Sciences       | Core   | 40        | 20   |
| 6BIOM005W   | Medical Microbiology in the Genomics Era  | Core   | 20        | 10   |

Please note: Not all option modules will necessarily be offered in any one year. In addition, timetabling and limited spaces may mean you cannot register for your first choice of option modules.

## Professional body accreditation or other external references

BSc Honours Biomedical Sciences is accredited by the Institute of Biomedical Sciences (IBMS), the professional body for biomedical scientists. This accreditation is a process of peer review and recognition by the profession of the achievement of quality standards for delivering BSc Honours Biomedical Sciences programme which conform to the QAA subject benchmark statement for biomedical science (October 2019). It also confirms that the course offers industry focused and professionally oriented learning, high quality work experience, and maintains engagement with its graduates as they develop their careers.

BSc (Hons) Biomedical Science is also accredited by the Royal Society of Biology (RSB). RSB accreditation recognises degree programmes that fully prepare bioscience graduates to address the needs of employers and is an indication that the programme delivers up-to-date knowledge in the right learning, support and teaching environments. Graduates from this programme are entitled to one year of free membership of the RSB as an Associate Member\_of the Royal Society of Biology (AMRSB).

## Course management

Your course is one of a number of programmes in the School of Life Sciences, part of the College of Liberal Arts and Sciences within the University of Westminster, and is managed by a designated course leader. In addition to the course specific role of the course leader, the Head of School, other senior school staff and the Associate Heads of College, also provide support and management at their respective levels. We also have a school employability director and global engagement coordinators who oversee work placement and international study arrangements respectively. The course leader is also collectively supported in the management and running of the course by the course teaching team through their responsibilities for individual modules and contributions to planning. You will meet your course leader, teaching team and members of the school senior management during arrivals week, a programme of events designed to help you with enrolment, registration, and orientation to the university, its processes and the culture of higher education.

The course is monitored each year by the course leader and senior members of the School and College to ensure that it is running effectively and that issues that might affect the student experience have been appropriately addressed. Each course will have Course Representative meetings throughout the year and staff will consider the outcomes from these meetings, evidence of student progression and achievement and the external examiner's reports to evaluate the effectiveness of the course. All courses are reviewed annually as part of the School, College and University Annual Monitoring processes, reporting finally to the Academic Council of the University which has overall responsibility for the maintenance of quality and standards in the University.

#### **Academic regulations**

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

Course specific regulations apply to some courses.

#### **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 Campus Registry. 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. Further information on Blackboard can be found

at https://www.westminster.ac.uk/current-students/studies/your-student-journey/when-you-arrive/blackboard

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. Further information on the Academic Learning Development Centre can be found at <a href="https://www.westminster.ac.uk/academic-learning-development">westminster.ac.uk/academic-learning-development</a>.

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 in their College. Students can also securely connect their own laptops and mobile devices to the University wireless network.

### **Support Services**

The University of Westminster Student and Academic Services 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. Further information on the advice available to students can be found at <a href="https://www.westminster.ac.uk/student-advice">https://www.westminster.ac.uk/student-advice</a>

The University of Westminster Students' Union also provides a range of facilities to support students during their time at the University. Further information on UWSU can be found at <a href="https://www.westminster.ac.uk/students-union">https://www.westminster.ac.uk/students-union</a>

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

The course was initially approved by a University Validation Panel. University Panels normally include internal peers from the University, academic(s) from another university. a representative from industry and a Student Advisor.

The course is also monitored each year by the College 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 evidence of student surveys, student progression and achievement and reports from external examiners, in order to evaluate the effectiveness of the course and make changes where necessary.

A Course revalidation 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 revalidation panels to provide feedback on their experiences. Student feedback from previous years 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 student engagement activities at Course/Module level, students have the opportunity to express their voice
  in the running of their course. Course representatives are elected to expressly represent the views of their peers.
  The University and the Students' Union work together to provide a full induction to the role of the course
  representatives.
- There are also School Representatives appointed jointly by the University and the Students' Union who meet with senior School staff to discuss wider issues affecting student experience across the School. Student representatives are also represented on key College 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.
- Final year Undergraduate students will be asked to complete the National Student Survey which helps to inform the national university league tables.

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 they take full advantage of the learning opportunities that are provided. This specification is supplemented by the Course Handbook, Module proforma and Module Handbooks provided to students. Copyright in this document belongs to the University of Westminster. All rights are reserved. This document is for personal use only and may not be reproduced or used for any other purpose, either in whole or in part, without the prior written consent of the University of Westminster. All copies of this document must incorporate this Copyright Notice – 2021©