Programme Specification for BSc (Hons) Biomedical Science

This document applies to Academic Year 2022/23 onwards

Table 1 programme specification for BSc (Hons) Biomedical Science

1.	Awarding institution/body	University of Worcester			
2.	Teaching institution	University of Worcester			
3.	Programme accredited by	Institute of Biomedical Science Accredited Programme			
4.	Final award or awards	BSc (Hons)			
5.	Programme title	Biomedical Science			
6.	Pathways available	Single			
7.	Mode and/or site of delivery	Standard taught programme			
8.	Mode of attendance	3 Years full time			
9.	UCAS Code	B900			
10.	Subject Benchmark statement and/or professional body statement	QAA Benchmark Statement Biomedical Sciences 2019			
11.	Date of Programme Specification preparation/ revision	May 2022			

12. Educational aims of the programme

The Honours degree programme in Biomedical Science is accredited by the Institute of Biomedical Science (IBMS) and aims to enable students to develop the knowledge, practical and intellectual skills necessary for a career in biomedical science, along with the theoretical and philosophical underpinning required to support professionalism, independent thought, personal responsibility, and decision making during a period of rapid change and increasing accountability. Biomedical Scientists are at the forefront of supporting the diagnosis and treatment of disease through laboratory and scientific testing. Biomedical Science graduates can go on to pursue careers as registered Biomedical Scientists (after a period of training in an IBMS approved training laboratory and the completion of the IBMS Registration Training Portfolio) in a range of NHS laboratory-based roles in medical screening and diagnosis. Alternatively, graduates could choose to progress into research or in laboratory, support, and technical roles in the pharmaceutical and biotechnology industries. Teaching and learning focus on practical skills and diagnosis based on simulations of real-life scenarios.

The educational aims of the programme are:

- to enable students to understand the biology of human health and disease and to equip students with practical and laboratory skills in order to carry out diagnostic investigations relevant to the role of a Biomedical Scientist and/or other roles associated with the biomedical sciences;
- to make students aware of industry standards and good practice, and to develop an awareness of, responsibility for, and a positive attitude towards Ethics and Health and Safety at work;
- 3. to develop team working and leadership skills, as well as skills of time management and task prioritisation;
- 4. to support students in the development of intellectual skills of critical evaluation, scientific analysis, and synthesis of ideas in order for them to be able to optimise their thinking and reflection skills;

- 5. to foster a spirit of enquiry and scientific discipline to enable students to design and undertake an independent research project;
- 6. to develop a range of skills to enable students to communicate their ideas effectively and appropriately in a variety of media;
- 7. to develop personal and interpersonal skills; self-awareness, personal responsibility, and reflection on the ethical, social, and economic implications of professional decisions;
- 8. to develop highly motivated, employable students with the intellectual and practical skills necessary to succeed in a changing and challenging working environment;
- 9. to provide the opportunity for students to train as accredited Biomedical Scientists, as conferred by the Institute of Biomedical Science, in recognition of their competencies in this subject.

13. Intended learning outcomes and learning, teaching and assessment methods

Table 2 knowledge and understanding outcomes for module code/s

Knov	Knowledge and Understanding				
LO no.	On successful completion of the named award, students will be able to:	Module Code/s			
1.	Demonstrate a detailed knowledge and understanding of the biology of human health, disease, and disease processes to support an understanding of biomedical science.	BIOL3022 BIOL3028			
2.	Discuss and evaluate the science of the causes, progression, investigation, and diagnosis of disease to facilitate management and treatment.	BIOL3013 BIOL3024			
3.	Demonstrate an in-depth knowledge of the basic principles of laboratory based bioanalytical diagnostic techniques used in clinical pathology and biomedical science in order to select analytic techniques appropriate to given scenarios.	BIOL3022 BIOL3024			
4.	Use a wide range of laboratory equipment to perform common biomedical laboratory techniques and investigations competently and in compliance with current good laboratory working practice, exercising personal responsibility for health and safety and ethical issues.	BIOL3022 BIOL3024			

Table 3 cognitive and intellectual skills outcomes for module code/s

Cog	Cognitive and intellectual skills				
5.	Use skills of reflection, evaluation and critical thinking in problem solving and decision making to support the effective management of practical skills.	BIOL3002 BIOL3028			
6.	Analyse and critically evaluate research evidence, information, and data from a variety of sources in the context of current theory and practice and use it to develop a research proposal.	BIOL3002, BIOL2015			
7.	Demonstrate independence of thought in the formulation, development and testing of hypotheses in biomedical science.	BIOL3025 BIOL3028			
8.	Accurately collect, describe, manage, and interpret scientific data from a range of sources, demonstrating skills of numeracy, data processing and analysis relevant to biomedical science.	BIOL3002 BIOL3028			

9.	Design and conduct an independent research project with minimal supervision.	BIOL3002
10.	Write clear and appropriately referenced laboratory and scientific reports.	BIOL3004 BIOL3013

Table 4 skills and capabilities related to employment outcomes for module code/s

Skills	Skills and capabilities related to employability				
11.	Demonstrate an awareness of and adherence to relevant legislation and maintain rigorous ethical standards.	BIOL2016 BIOL3002			
12.	Exercise professionalism and demonstrate personal responsibility for good working practices and decision-making as needed for employment in biomedical science.	BIOL3023 BIOL3024			
13.	Reflect on, analyse, and evaluate own academic, vocational, and professional performance and practice, taking responsibility for personal independent working and professional learning and development.	BIOL2016 BIOL3002			
14.	Understand career opportunities, manage change effectively and begin to plan a career path.	BIOL1010 BIOL2016			

Table 5 transferable/key skills outcomes for module code/s

Tran	Transferable/key skills				
15.	Demonstrate competence in a range of information management skills; for example, in written and verbal communication, the use of information technology in the workplace, managing library resources.	BIOL3002 BIOL3025			
16.	Work effectively with a wide range of individuals and groups and as part of a team, establishing professional and ethical relationships using a variety of means.	BIOL3013 BIOL3024			
17.	Demonstrate independent problem-solving skills in a variety of theoretical and practical situations, the ability to work on one's own initiative, and manage one's own time to meet deadlines.	BIOL3002 BIOL3028			
18.	Apply professional judgement and ethical considerations to solve clinical problems.	BIOL3002 BIOL3022			

Practical skills for employment are also addressed through the Biosciences skills passport, where students on all levels of the course will have the practical skills they gain recorded.

Learning, teaching and assessment

The majority of teaching sessions are face-to-face on campus. To maximise flexibility for the wide range of students typically studying at the University of Worcester, some sessions may be delivered as blended learning via platforms such as the Blackboard virtual learning environment (VLE). Individual and small group tutorials will generally be arranged online as this has proven to be convenient and popular with students.

The BSc (Hons) in Biomedical Science aims to provide supportive, student-centred learning environments that acknowledge and respond to the diversity of student

backgrounds and experiences. The structure of the course enables students to move towards increasing independence in their studies from Level 4 to Level 6 in line with the Framework for Higher Education Qualifications (FHEQ) and University policies for assessment and curriculum design. Level 4 modules offer students structured tutor support for their learning, whilst at Level 5 this support becomes less structured, although the extent to which this occurs varies with the difficulty of the task. At Level 6, modules offer students opportunities for more independent learning, although specific tutor help will always be available. Module learning outcomes, and hence assessments will always be more demanding at Level 6.

Students will participate in a wide range of learning experiences. Teaching, assessment, and private study are interlinked in that they are all aspects of each student's personal and academic development.

The course employs a variety of assessment methods. For more details, please see section 14 of this programme specification.

Teaching

Students are taught through a combination of activities including on campus and online lectures and seminars (tutor and student-led), practical laboratory investigations and/or field trips, tutorials, directed reading, self-directed study, group work and team projects, reflective practice, class discussions, case studies, independent research, and interactive workshops. Interactive workshops take a variety of formats and are intended to enable the application of learning through discussion and small group activities. Seminars enable the discussion and development of understanding of topics covered in lectures, and laboratory practical/fieldwork sessions help develop confidence in relevant practical skills and the ability to relate theory to practice.

In a typical week, students will have at least 12 contact hours of teaching, most of which will be on campus. The precise contact hours will depend on the optional modules selected and in the final year there is normally slightly less contact time to allow students to focus on their research project.

Contact Time

Typically, class contact time will be structured around:

- 4 8 hours of lectures
- 4 7 hours of supervised laboratory practical sessions
- 1 hour of group workshops
- 1 hour of Study Skills (first year only)

Independent self-study

In addition to the contact time, students are expected to undertake around 24 hours of personal self-study per week. Typically, this will involve:

- Reviewing lecture notes and reading around topics to reinforce and expand on content
- Directed and self-directed reading and watching of video content
- Working through problems in appropriate texts and online
- Preparation of coursework assignments and revising for exams
- Working with colleagues on team tasks and projects

Independent learning is supported by a range of excellent learning facilities, including the Hive and library resources, the virtual learning environment, and extensive electronic learning resources.

Teaching staff

Students will be taught by a committed, experienced, and expert teaching team. The team includes lecturers, senior and principal lecturers, associate lecturers, visiting professionals and laboratory technicians.

Teaching is informed by research and consultancy, and 79% of lecturers on the course have a higher education teaching qualification or are Fellows of the Higher Education Academy. University of Worcester students are taught by academics whose research is nationally and internationally recognised.

Information about the staff is available via our Staff Profiles page.

Assessment

The course provides opportunities to test understanding and learning informally through the completion of practice or 'formative' assignments. Each module has one or more formal or 'summative' assessment, which is graded and counts towards the overall module grade.

The precise assessment requirements for an individual student in an academic year will vary according to the mandatory and optional modules taken, but a typical formal summative assessment pattern for each year of the course is:

- Year 1 (Level 4): 4 x practical reports/files, 3 x exams, 2 x short in-class test assessments, 2 x group-based oral presentations, 2 x essays, 1 x practical test.
- Year 2 (Level 5): 6 x exams, 3 x practical reports/handbooks, 1 x research proposal, 1 x group report, 1 x reflective report, 1 x practical test.
- Year 3 (Level 6): 6 x exams, 2 x essays, 1 x research project dissertation, 1 x poster presentation, 1 x interim review, 1 x practical test, 1 x group report, 1 x individual presentation, 1 x practical report / 1 x group poster.

14. Assessment strategy

The Biomedical Science degree aims to develop autonomous and independent learners who possess a broad range of intellectual, practical, and transferable skills. In order to achieve these aims, a range of methods is used to assess students. Assessment methods include examinations, practical skills tests, practical reports, in-class tests, critical essays, oral presentations, poster presentations, abstract writing, case study interpretation, project design and the production of an independent research project report/dissertation.

Students have opportunities to develop the appropriate skills necessary for the particular assessment type used before summative assessment takes place. Extensive feedback is given on assessments and students are supported, through the Personal Academic Tutoring Programme for the course, in reflecting and acting on this feedback in order to support their academic development.

Formative assessment is a key part of the learning process and in this course, it takes a variety of forms, including peer-marked formative laboratory report, formative multiple-choice tests / mock examinations, regular formative clicker tests, formative practise for presentations, as well as more informal feedback on essays and reports.

As far as possible, the assessments have been spread throughout the modules. However, the skills and depth of understanding to be assessed take time to develop and consequently assessment deadlines do not generally occur in the first half of the module.

All module guides contain detailed assignment briefs and grading criteria which are specific for that particular assignment. Study Skills, which form part of the extended induction for Level 4 students, as well as some modules, include sessions on how to make good use of this information.

15. Programme structures and requirements

An award map is appended to this document.

16. QAA and professional academic standards and quality

This award is located at Level 6 of the FHEQ. The course has been developed with reference to the <u>QAA Biomedical Sciences Benchmark Statement (2019)</u>, which has been used to inform course outcomes and skills. QAA and UW guidelines on work related learning and experience have also been followed. All modules at Levels 4 and 5 are mandatory. This course is accredited by the <u>Institute of Biomedical Science</u>.

The BSc (Hons) Biomedical Science course handbook shows how the Science professional development planning (PDP) skills, based on the Biomedical Science QAA benchmark statement, are linked to the individual modules in the course. Key and Transferable skills are mainly expressed through the Science PDP scheme. Practical skills for employment are also addressed through the Biosciences Skills Passport, where students on all levels of the course will have the practical skills they have gained recorded.

17. Support for students

Biomedical Science students experience a wide variety of learning and teaching methods detailed in Section 13 above, and these are frequently reviewed and adapted to ensure students have the best support and guidance possible. In addition to the University's Welcome Week, all Level 4 students have an induction programme extending throughout the year in one of the 30 credit modules and in the Progress Weeks in both Semester 1 and 2. This extended induction allows the necessary study skills to be developed at the most appropriate times for the students.

All students are assigned a Personal Academic Tutor who they see at least four times at Level 4, and three times at Levels 5 and 6. The requirement to engage with the Personal Academic Tutoring Programme is linked to a mandatory module at each level of the course. The tutorial sessions are structured to guide and support each student, on an individual basis, throughout their course and to help them to realise their potential.

Students have access to a Virtual Learning Environment (which includes Blackboard Learn and *Microsoft* Teams) in which they are provided with module-specific material, documents, activities, videos, *etc.* Students are given the BSc (Hons) Biomedical Science Course Handbook (published on an annual basis) to provide them with detailed course information, information on modules and options available, and details of how to access University support for their studies. Students are also given detailed

module guides for each module which include planned teaching activities, attendance requirements, assessment briefs, assessment criteria and resource lists.

The Disability and Dyslexia Service (DDS) provides advice and support to students who have a disability, medical condition, or specific learning difficulty, including dyslexia. The DDS also provides support and advice to other departments and individual staff on how to ensure the needs of individual students are met. For more details see:

https://www2.worc.ac.uk/firstpoint/

https://www.worcester.ac.uk/life/help-and-support/services-for-students/home.aspx https://www2.worc.ac.uk/disabilityanddyslexia/

18. Admissions

Admissions policy

We welcome applications from people of all ages and backgrounds with an interest in studying biological sciences. The University aims to be accessible; it is committed to widening participation and encouraging diversity in the student population. The School of Science and the Environment works closely with central student support services, including the Admissions Office, the Disability and Dyslexia Service and the International team (student services) to support students from a variety of backgrounds. We actively encourage and welcome people from the widest range of economic and cultural backgrounds, and value the contribution of mature students.

Entry Requirements

The normal minimum entry requirement for undergraduate degree courses is the possession of 4 GCSEs (Grade C/4 or above) and a minimum of 2 A Levels (or equivalent Level 3 qualifications). Applicants for this course must have an A Level pass in Biology, Human Biology or Chemistry and another science, Maths or Statistics, plus another subject area will also be considered. Alternatively, applicants for this course must have an A Level pass in Biology, Human Biology or Chemistry plus the study of two other subject areas. Applicants with Pearson BTEC Level 3 National Extended Diploma DMM in a Science subject will also be considered. Students who successfully pass the University's Foundation Year in Biological Sciences will also be eligible to progress onto Level 4 of the Biomedical Science degree.

The current UCAS Tariff requirements for entry to this course are published in the prospectus and on the UW website https://www.worc.ac.uk/journey/a-z-of-courses.html

English Language Requirements

Applicants for this course must also have a good command of reading, writing and spoken English and will need to meet the HCPC's English language requirements for regulation as a Biomedical Scientist at the point of graduation. Applicants whose first language is not English are required to provide a language test certificate as evidence of their proficiency and must ensure that it is, or is comparable to, IELTS level 7.0 with no element below 6.5 (HCPC, 2017).

Disclosure and Barring Service (DBS) requirements

A satisfactory DBS disclosure may be required if a placement/Work Based Learning experience is arranged as the course develops and requires this. The cost of this will be met by the student.

Recognition of Prior Learning

Details of acceptable Level 3 qualifications, policy in relation to mature students or applicants with few or no formal qualifications can be found in the prospectus or on the University webpages. Information on eligibility for recognition of prior learning for the purposes of entry or advanced standing is also available from the University webpages or from the Registry Admissions Office (01905 855111).

Further information on Recognition of Prior Learning can be found on our How to Apply page.

Admissions procedures

Applicants are considered on the basis of their UCAS application forms. It is not currently standard practice to interview candidates, but those entering via non-standard entry routes will be interviewed. Those who accept our offer will be invited to an Applicant's Visit Day to experience studying at the University of Worcester.

Full-time applicants apply through UCAS B900.

Admissions/selection criteria

Offers are made in line with the entry requirements specified above and demonstration, via the application form, of a strong interest in Biomedical Science. The reference provided as part of the application is also considered.

19. Regulation of assessment

The course operates under the University's <u>Taught Courses Regulatory</u> Framework.

Requirements to pass modules

- Modules are assessed using a variety of assessment activities, which are detailed in the module specifications.
- The minimum pass mark is D- for each module.
- Students are required to submit all items of assessment in order to pass a module, and in some modules, a pass mark in each item of assessment may be required.
- Full details of the assessment requirements for a module, including the assessment criteria, are published in the module outline.

Submission of assessment items

- Students who submit course work late, but within 7 days (one week) of the due
 date, will have work marked, but the grade will be capped at D- unless an
 application for mitigating circumstances is submitted and accepted.
- Students who submit work later than 7 days (one week) will not have work marked unless they have submitted a valid claim of mitigating circumstances.
- For full details of submission regulations, please see the <u>Taught Courses</u> Regulatory Framework.

Retrieval of failure

- Students are entitled to a reassessment attempt in any module that is awarded a fail grade.
- Reassessment items that are passed are capped at D-.
- If a student is unsuccessful in the reassessment, they have the right to retake the module (or, in some circumstances, take an alternative module); the module grade for a re-taken module is capped at D-.
- A student will be notified of the reassessment opportunities in the results notification issued via the secure student portal (SOLE). It is the student's responsibility to be aware of, and comply with, any reassessment.

Requirements for Progression

- A student will be permitted to progress from Level 4 to Level 5 if, by the time of the
 reassessment Board of Examiners, they have passed at least 90 credits at Level
 4. Outstanding Level 4 credits must normally be studied in the following academic
 year.
- A student will be permitted to progress from Level 5 to Level 6 if, by the time of the reassessment Board of Examiners, they have passed at least 210 credits, including 90 credits at Level 5. Outstanding Level 5 credits must normally be studied in the following academic year.
- A student who, by the time of the reassessment Board of Examiners, has failed 90 credits or more (after exhausting all reassessment opportunities) during the academic year, will have their registration with the University terminated.
- If a student has not passed at least 90 credits by the reassessment Board of Examiners, the student is not permitted to progress to the next level and will be required to either complete outstanding reassessment or retake the failed modules the following academic year. Students will be able to carry forward any passed modules.

Requirements for Awards

Award	Requirement
Certificate of Higher Education Cert HE Biomedical Studies	In order to be eligible for the exit award of Certificate in Higher Education in Biomedical Studies, a student must have passed at least 120 credits in total including the mandatory modules for level 4 of the award as specified on the award map.
Diploma of Higher Education DipHE Biomedical Studies	In order to be eligible for the exit award of Diploma in Higher Education in Biomedical Studies, a student must have passed at least 240 credits in total including the mandatory modules for level 4 and level 5 of the award as specified on the award map.
Degree (non-honours) Biomedical Studies	Passed a minimum of 300 credits with at least 90 credits at Level 5 or higher and a minimum of 60 credits at Level 6, as specified on the award map.
Degree with honours Biomedical Science	Passed a minimum of 360 credits with at least 120 credits at Level 5 or higher and a minimum of 120 credits at Level 6, as specified on the award map.

Classification

The honours classification will be determined by whichever of the following two methods results in the higher classification:

- Classification determined on the profile of the best grades from 60 credits attained at Level 5 and the best grades from 120 credits at Level 6. Level 5 and Level 6 grades count equally in the profile.
- Classification determined on the profile of the best grades from 120 credits attained at Level 6 only.

For further information on honours degree classification, see the <u>Taught Courses</u> Regulatory Framework.

20. Graduate destinations, employability, and links with employers

Graduate destinations

The IBMS-accredited degree in Biomedical Science at the University of Worcester delivers a diverse study programme and extensive experience of analytical and practical techniques that prepares graduates for employment in a wide range of laboratory-based roles. The honours degree will also equip students with the knowledge and skills that will give them the best possible start to their career and prepares graduates for a wide range of <u>careers in Biomedical Science</u> and further study pathways.

Studying Biomedical Science at the University of Worcester will enhance students' knowledge of science and its practical application to healthcare and research.

Our Biomedical Science graduates have proved to be highly employable and many have gone on to work in the NHS laboratories to complete the <u>IBMS Registration Training Portfolio and Certificate of Competence</u>, which enables candidates to demonstrate that they meet <u>HCPC standards of proficiency</u> and are eligible to apply for HCPC registration as a Biomedical Scientist.

Biomedical Scientists work in a range of healthcare areas, including:

- cancer
- cellular pathology
- clinical biochemistry
- diabetes
- haematology, e.g., blood disorders such as anaemia and haemophilia
- immunology
- microbiology
- transfusion science
- virology
- many others....

Other graduates have progressed to a wide range of careers in industry, working in commercial research and diagnostic laboratories. Yet others have progressed to postgraduate education, including the University's own MSc Physician Associate, as well as master's degrees and PhDs at other institutions.

Student employability

Careers and employability are embedded in the curriculum at all three levels. For example, the module BIOL 1010 Professional Development in Biomedical Science introduces students to possible careers in Biomedical Science and develops relevant analytical and laboratory skills, as well as giving the students the opportunity to visit hospital pathology departments and connect with Biomedical Science professionals. This is followed up at Level 5 in BIOL 2016 Professional Aspects of Biomedical Science, which looks at professional responsibilities and expectations, and enables students to try out different roles in a Biomedical Science related project. At Level 4, students are introduced to the Careers Service in BIOL 1001 Cell Biology as part of the Science PDP scheme. Careers advice is given at all levels of the course. Students are given the opportunity in almost every module to develop practical and work-related skills (see PDP table above). Students will also record their practical skills in the Technical Skills Passport as a record to show prospective employers.

Links with employers

The University of Worcester has established links with a range of employers related to the biomedical sciences. These include:

- Worcestershire Acute Hospitals NHS Trust
- Wye Valley NHS Trust
- Gloucestershire Hospitals NHS Foundation Trust
- Seguani Ltd
- Severn Biotech
- Malvern Cosmeceutics
- Malvern Instruments
- · Bio Diagostics Ltd

These employers support both course development and delivery by informing course designers and teaching staff of the skills and competencies they require, by providing opportunities for student workplace visits, and by giving talks and demonstrations to students.

This course has been developed with the support and input of employers to ensure that it is designed with their needs in mind. In this way, the course will maximise the employment opportunities for its graduates.

Please note: 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 s/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 each module can be found in associated course documentation, e.g., course handbooks, module outlines and module specifications.

Award map template for: Single Honours at Levels 4, 5 and 6

Table 6 award map for level 4 BSc (Hons) Biomedical Science

Course Title: BSc Hons Biomedical Science

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre- requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
BIOL1001	Cell Biology	30	М	None	None
BIOL1003	Health and Disease	30	М	None	None
BIOL1004	Introduction to Human Anatomy and Physiology	15	М	None	None
BIOL1005	Chemistry for the Life Sciences	15	М	None	None
BIOL1007	Introduction to Evolution and Genetics	15	М	None	None
BIOL1010	Professional Development in Biomedical Science	15	М	None	None

Single Honours Requirements at Level 4
Single Honours students must take 120 credits in total drawn from the table above to include all mandatory modules

Table 7 award map for level 5 BSc (Hons) Biomedical Science

Level 5						
Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*	
BIOL2002	Systems Physiology 1	30	М	BIOL1001 & either BIOL1004 or BIOL1003	None	
BIOL2004	Molecular and Cellular Biology	30	М	BIOL1001	BIOL2006 & BIOL2005 (exclusions)	
BIOL2007	Microbiology	15	М	BIOL1001	None	
BIOL2014	Clinical Immunology	15	М	BIOL1001 & BIOL1005	BIOL3003 (exclusion)	
BIOL2015	Project Development	15	М	None	None	
BIOL2016	Professional Aspects of Biomedical Science	15	М	None	None	

Single Honours Requirements at Level 5
Single Honours students must take 120 credits in total drawn from the table above to include all mandatory modules

Table 8 award map for level 6 BSc (Hons) Biomedical Science

Level 6					
Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
BIOL3002	Research Project	30	М	BIOL2015	None
BIOL3022	Infection Science and Antimicrobial Resistance	15	М	BIOL2007 & BIOL2014	None
BIOL3023	Haematology and Transfusion Science	15	М	BIOL2002 & BIOL2014	None
BIOL3024	Cell Pathology	15	М	BIOL2004 & BIOL2014	None
BIOL3025	Neuroendocrinology	15	М	None	None
BIOL3028	Clinical Biochemistry for Biomedical Science	15	М	BIOL2004	None
BIOL3004	Pharmacology	15	0	BIOL2004	None
BIOL3013	The Biochemistry of Cancer	15	0	BIOL2004	None

Single Honours Requirements at Level 6
Single Honours students must take 120 credits from the table above to include all mandatory modules