

Programme Specification for BSc (Hons) and MBIol Biology awards

This document applies to Academic Year 2022/23 onwards

Table 1 programme specification for BSc (Hons) and MBIol Biology pathway awards

1.	Awarding institution/body	University of Worcester
2.	Teaching institution	University of Worcester
3.	Programme accredited by	N/A
4.	Final award or awards	BSc (Hons) and MBIol
5.	Programme title	Biology (Animal Biology) Biology (Biochemistry) Biology (Biological Sciences) Biology (Human Biology)
6.	Pathways available	Single Honours BSc and Integrated Masters
7.	Mode and/or site of delivery	Campus-based programme at University of Worcester
8.	Mode of attendance and duration	BSc (Hons) full time over three years and MBIol full time over four years with part time study available part time. Field courses may require residential attendance in the UK or abroad.
9.	UCAS Code	BSc: C100 MBIol: C1C1
10.	Subject Benchmark statement and/or professional body statement	<u>QAA Subject Benchmark Statement Biosciences October 2019</u>
11.	Date of Programme Specification preparation/ revision	July 2021 August 2021– AQU amendments January 2022 – BIOL3015 change to pre-req August 2022 – AQU amendments November 22 – BIOL2104 titled change to Clinical Immunology November 2022 – additional of BIOL3026 (mandatory)/removal of BIOL3017 (optional) December 2022 – update to text Biological Sciences L6 award map and Animal Biology L6 award map. January 2023 – Human Biology and Biochemistry pathways only - BIOL2111 change from optional to mandatory and BIOL2014 from mandatory to optional. January 2023 – Animal Biology and Biological Sciences pathways only – replacement of BIOL2111 with BIOL2014

12. Educational aims of the programme

The BSc/MBiol Biology at the University of Worcester is a broad-based course with a common core in year 1 (Level 4) and then four distinct pathways which provide students with the option to specialise in one of four key areas (Biological Sciences, Animal Biology, Biochemistry and Human Biology), as they progress through the course.

There is a strong emphasis on practical laboratory skills throughout the course which means that students wishing to enter postgraduate study or scientific careers in the NHS or industry are well prepared. Students also have a valuable opportunity to undertake an independent research project, planned and agreed with their supervisor in their third

year. The focus on 'hands on' practical work provides students with useful skills, sought after by employers, to maximise the potential for success in their future careers.

The University has a strong commitment to widening participation in higher education and students without the conventional entry qualifications may access the BSc degree via a Foundation Year and provides excellent support in learning and teaching at all levels of study on the course. Students also have the opportunity to study for an Integrated Master's award (MBiol), which involves an additional year of study, where students explore an in-depth area, they are interested in, with the support of their supervisor. An integrated master's degree can enhance a student's opportunities to access postgraduate study, such as a PhD.

The course aims to:

1. Provide a broad practical laboratory and/or field-based curriculum across the biological sciences, enabling students to specialise in their chosen area of biology.
2. Create a supportive learning environment which acknowledges and responds to the diversity of student backgrounds and experiences, and which gives all students the opportunity to realise their academic potential.
3. Provide students with an informed opportunity to study their chosen pathway of biology at a depth and level appropriate to honours degree and/or integrated master's standard.
4. Enable the development of professionalism, team working and leadership skills, and the essential skills of time management and task prioritisation.
5. Support students in the development of intellectual skills of critical evaluation, scientific analysis, and synthesis of ideas, for them to be able to optimise their skills of thinking and reflection.
6. Foster a spirit of enquiry, scepticism, and scientific discipline to enable students to critically evaluate published research and to design and undertake an independent research project of their own.
7. Develop highly motivated employable students with the intellectual and practical skills, and resilience necessary to succeed in a developing and challenging employment environment.
8. Encourage students to develop a range of subject-specific and transferable skills relevant for graduate employment and/or postgraduate study in the biological sciences.

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

Learning Outcomes: BSc (Hons):

Biology (Animal Biology)
Biology (Biochemistry)
Biology (Biological Sciences)
Biology (Human Biology)

By completing Level 6 of the programme, as set out on the award map, students will have attained all the intended learning outcomes as set out below.

Table 2 knowledge and understanding outcomes in module code/s

Knowledge and Understanding		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
1	Critically evaluate accepted theories about the origins of life, the principles of evolution through natural selection and diversity, and the requirements for life to survive and thrive.	BIOL 3009 BIOL 3011
2	Explain and apply the key concepts and principles underpinning a range of biological systems, recognising the limitations of current knowledge and the challenges of confounding factors in complex systems.	BIOL 3011 BIOL 3015

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

Cognitive and Intellectual skills		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
3	Record and analyse data from a wide variety of sources, applying statistical techniques to interpret findings and test hypotheses from primary and secondary research.	BIOL 3002 BIOL 2001
4	Use skills of reflection, evaluation, and critical thinking in problem-solving and decision-making to support the effective management of practical skills.	BIOL 3018 BIOL 3013 BIOL 3005
5	Synthesise, evaluate, and apply current knowledge of key aspects of the biological sciences to solve problems and make reasonable predictions.	BIOL 3003 BIOL 3016 BIOL 3014 BIOL 3005

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

Skills and capabilities related to employability		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
6	Design and conduct an independent research project with minimum supervision and communicate the findings clearly, both orally and in writing.	BIOL 3002
7	Analyse and reflect on their own learning and practice to develop personally, professionally, and ethically, and begin to plan a career direction.	BIOL 2001
8	Evaluate, select, and competently use a range of appropriate practical techniques and skills relevant to the biological sciences, and to work safely and appropriately in fieldwork and/or laboratory environments.	BIOL 3002 BIOL 3009 BIOL 3014

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

Transferable/key skills		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
9	Demonstrate competence in a range of information management skills; for example, in written and verbal communication, the use of information technology in the workplace and managing information resources.	BIOL 3009 BIOL 3014 BIOL 3015 BIOL 3003
10	Work co-operatively with others to solve problems and communicate findings effectively, both orally and in writing.	BIOL 3011 BIOL 3013 BIOL 3019
11	Apply independent problem-solving skills in a variety of theoretical and practical situations, exercising initiative and taking personal responsibility for time management and meeting of deadlines.	BIOL 3002

Additional learning outcomes for individual pathways

Biological Sciences

Table 6 knowledge and understanding outcomes for module code/s: Biological sciences

Knowledge and Understanding		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
12	Analyse and evaluate bioinformatic data and explain the multidisciplinary nature of computational biology.	BIOL 3009
13	Evaluate and interpret laboratory findings in the context of published academic literature and demonstrate the resulting understanding via oral presentation.	BIOL 3005

Animal Biology

Table 7 knowledge and understanding outcomes for module code/s: Animal Biology

Knowledge and Understanding		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
14	Critically analyse contemporary practical and ethical issues in zoology and conservation	BIOL 3018
15	Evaluate and discuss current knowledge in relation to animal welfare.	BIOL 3019

Human Biology

Table 8 knowledge and understanding outcomes for module code/s: Human Biology

Knowledge and Understanding		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
16	Critically evaluate current knowledge of the integrative nature of the neuroimmune and neuroendocrine systems	BIOL 3003
17	Discuss critically, the science, use and ethical implications of assisted reproductive technology.	BIOL 3010

Biochemistry

Table 9 knowledge and understanding outcomes for module code/s: Human Biology

Knowledge and Understanding		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
18	Explain how the principles of thermodynamics influence metabolic pathways and critically evaluate different mechanisms of regulation of those pathways.	BIOL 3015
19	Explain the molecular basis of cancer and critically evaluate the application of contemporary technologies for cancer treatment.	BIOL 3013

Learning Outcomes: Integrated Master's Degree Biology (Biological Sciences, Animal Biology, Human Biology, Biochemistry).

By completing level 7 of the programme, as set out on the award map, students will also have attained all the intended learning outcomes as set out below.

Table 10 knowledge and understanding outcomes for module code/s: Integrated Master's Degree Biology (Biological Sciences, Animal Biology, Human Biology, Biochemistry)

Knowledge and Understanding – all pathways		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
1	Evaluate and interpret in-depth principles and processes in cutting edge areas of Biological Sciences.	BIOS4003
2	Critically analyse and apply the fundamental principles of important molecular biology techniques to own research.	BIOS4003

Table 11 cognitive and intellectual skills outcomes for module code/s: Integrated Master's Degree Biology (Biological Sciences, Animal Biology, Human Biology, Biochemistry)

Cognitive and Intellectual skills - all pathways		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
3	Extrapolate biological theories from complete and incomplete data sets and make sound judgements in the absence of complete data.	BIOS 4001 BIOS 4003
4	Develop innovative problem-solving capabilities and apply discipline-related skills to the execution of an individual research project, involving the definition, analysis, and resolution of complex research problems.	BIOS 4003

Table 12 skills and capabilities related to employability outcomes for module code/s: Integrated Master's Degree Biology (Biological Sciences, Animal Biology, Human Biology, Biochemistry)

Skills and capabilities related to employability – all pathways		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
5	Exercise professionalism and demonstrate personal responsibility for good working practices and ethical decision-making.	BIOS 4001 BIOS 4003
6	Demonstrate entrepreneurship by producing and pitching a business plan to commercialise an aspect of scientific innovation.	BIOS 4002

Table 13 transferable/key skills outcomes for module code/s: Integrated Master's Degree Biology (Biological Sciences, Animal Biology, Human Biology, Biochemistry)

Transferable/key skills – all pathways		
LO no.	On successful completion of the named award, students will be able to:	Module Code/s
7	Competently use industry standard software for statistical analysis and other specialised applications.	BIOS 4003
8	Prepare and correctly format an academic paper for publication and complete an associated grant application.	BIOS 4001 BIOS 4003

Learning, teaching and assessment

The University places a strong emphasis on enabling students to develop the independent learning capabilities, spirit of enquiry and sense of aspiration that will equip them for lifelong learning and future employment, as well as academic achievement. A mixture of independent study, teaching and academic support through the personal academic tutoring system enables students to reflect on progress and build up a profile of skills, achievements and experiences that will support them to flourish and be successful in their chosen career.

At Level 7, students will be expected to demonstrate a higher level of independence and originality in their work, especially in the dissertation, but will continue to be supported through structured lectures, workshops, and tutorials.

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/field work sessions are focused on developing confidence in relevant practical skills and the ability to relate theory to practice.

As students progress to Level 7, there will be more emphasis on self-directed study, and students will be expected to engage proactively with their supervisor.

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 VLE.

In addition, meetings with Personal Academic Tutors (PATs) are scheduled on at least four occasions in the first year and three occasions in each of the subsequent years of a course. These meetings are designed to support reflection on feedback, identify learning needs and to help students with their more general personal academic development. There is an opportunity to undertake a work experience module at Level 5. Students may also engage with an exchange scheme, spending a semester abroad.

The BSc (Hons)/M Biol Biology course handbook shows how the Science Personal Development Planning skills, (based on the [QAA Subject Benchmark Statement Biosciences October 2019](#)), 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.

Contact time

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.

Typically, class contact time will be structured around:

- 4 hours of lectures/seminars
- 7 hours of supervised laboratory practicals
- 1 hour of group workshops
- 1 hour of Study Skills (**Level 4 only**)

Class sizes will vary; core subjects tend to have larger classes (70+), whilst more specialised modules will have smaller class sizes, often of 15 – 25. At Level 7, class-based teaching hours will be reduced and class sizes, where applicable, will be small, likely 6-10 students, with taught activities being more focused on small group work.

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.

At level 7, students should expect to engage in a significantly greater level of independent directed and self-directed study, and individual schedules will be agreed with their supervisor.

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, laboratory technicians.

Teaching is informed by research and consultancy, and 82% 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 lab reports, 1 x scientific article, 1 x video project, 2 x short in-class test assessments, 1 x exam, 2 x oral presentations, 1 x practical test.

Year 2 (Level 5): 3 x practical file/report, 2 x exams, 2 x poster presentations, 1 x practical test, 1 x research proposal, 1 x analysis skills test, 2 x portfolio.

Year 3 (Level 6): 2 x practical reports, 4 x exam, 1 x oral exam, 1 x in-class test, 1 x literature review, 2 x reports, 1 x interim review, 1 x research project report, 1 x poster presentation.

Year 4 (Level 7 MBIol only): 1 x grant application, 1 x review of progress, 1 x laboratory notebook, 1 x group business plan, 1 x group presentation, 1 x reflective account, 1 x interim evaluation, 1 x dissertation report, 1 x poster presentation.

14. Assessment strategy

The BSc (Hons)/MBiol Biology courses aim to develop autonomous and independent learners who possess a broad range of intellectual and transferable skills that will support them in their chosen careers. To achieve these aims, a range of assessment methods are used which include reports, examinations, practical tests, practical and field reports, in-class tests, presentations, and poster presentations. These assessments will allow students to develop skills highly sought after by employers. For example, oral presentations and report writing are key skills that will be used in all graduate level employment. Exams and in class tests allow students to demonstrate the knowledge that will be required in many careers after graduation.

Students have opportunities to develop the appropriate knowledge and skills necessary for each assessment type used before summative assessment takes place and extensive feedback is given on each assessment. Feedback may be provided in written or recorded form and will generally be delivered via Blackboard. Through the Personal Academic Tutoring programme for the course, students are supported to reflect and act on this feedback to enhance their academic development. In addition, all modules contain formative assessments, which are ongoing assessments designed to help students develop their work and do not contribute towards marks. For example, the level 4 30-credit modules provide regular and rapid feedback by using quiz type online response systems.

At Level 7, assessment comprises more extended pieces of work, with an emphasis on interpreting findings from own research and demonstrating professional skills such as preparing papers for academic publication and developing funding applications.

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 the module. The range of assessment tasks used and their weightings, together with a calendar of submission dates, is shown in the students' handbook.

All module guides contain detailed assignment briefs and grading criteria which are, in most cases, specific for each assignment. Part of the extended induction for Level 4 students includes sessions on how to make good use of the guidance given in the module guides.

15. Programme structures and requirements

An award map is appended to this document.

16. QAA and professional academic standards and quality

For the BSc (Hons), this award is located at Level 6 and for the Integrated Masters (MBiol) this award is located at Level 7 of the of the [FHEQ](#). The course has been developed with reference to the [QAA Subject Benchmark Statement Biosciences October 2019](#) which has been used to inform course outcomes and skills.

The BSc (Hons)/MBiol Biology course handbook shows how the Science professional development planning (PDP) skills, based on the Biology 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

Biology 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 are guided through a Personal Development Planning (PDP) scheme related to the current QAA Subject Benchmark Statement Biosciences October 2019 to enable students to plan the most appropriate path through their course and to enhance their employability. All lecturers have an open-door policy.

There is a strong emphasis on practical and laboratory work in the University's excellent facilities. Students will use specialist equipment to carry out course related experiments and independent research. A Skills Passport is provided for students to record practical skills in which they become proficient on the course.

Students have access to a Virtual Learning Environment (which includes the Blackboard Learn and Microsoft Teams) in which they are provided with module-specific material, documents, activities, videos, etc. Students are given the BSc (Hons)/MBiol Biology 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/>

The BSc (Hons)/MBiol Biology course handbook provides detailed information on all the above points as well as information on modules and options available.

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 the BSc/ MBIol Biology (Animal Biology) (Biochemistry) (Biological Sciences) (Human Biology) must have an A Level pass in Biology, Human Biology or Chemistry. Applicants seeking to enter this programme with the lower UACS tariff (see web page), in addition to an A Level pass in Biology, Human Biology or Chemistry, applicants must also have an A level pass in another science, maths or statistics. Students who successfully pass the University's Foundation Year in Biological Sciences will also be eligible to progress onto Level 4 of the Medical Sciences degree.

Applicants who do not meet the entry requirements may wish to apply for the Foundation Year in Biological Sciences

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>

See the University's Admissions Policy for other acceptable qualifications.

Disclosure and Barring Service (DBS) requirements

A satisfactory DBS disclosure may be required if a placement/Work Based Learning experience 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 at <http://www.worcester.ac.uk/registryservices/941.htm>

Admissions procedures

Full time applicants apply through UCAS course code C100 for BSc (Hons) Biology or UCAS course code C1C1 for MBIol Integrated Master's in Biology.

Part-time applicants apply directly to the University of Worcester (UW)

Admissions/selection criteria

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 may be interviewed. Those who accept our offer will be invited to an Applicant Day to experience studying Biological Sciences at the University of Worcester.

19. Regulation of assessment

The course operates under the University's Taught Courses Regulatory Framework

Requirements to pass modules

- Modules are assessed using a variety of assessment activities which are detailed in module specifications.
- The minimum pass mark is D- for each module.
- A student is 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 individual module outlines.

Submission of assessment items

- A student who submits 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.
- A student who submits 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 Taught Courses Regulatory Framework.

Retrieval of failure

- A student is 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 reassessments.

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 will be permitted to progress from Level 6 to Level 7 if, by the time of the reassessment Board of Examiners, they have passed at least 240 credits at Levels 4

and 5 and at least 90 credits at Level 6. Outstanding Level 6 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 will not be 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

Table 14 requirements for awards

Award	Requirement
Certificate of Higher Education: Cert HE Biology: (Biological Sciences) (Animal Biology) (Biochemistry) (Human Biology)	To be eligible for the exit award of Certificate in Higher Education in the named subject/area of study, 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 Biology: (Biological Sciences) (Animal Biology) (Biochemistry) (Human Biology)	To be eligible for the exit award of Diploma in Higher Education in the named subject/area of study, 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) Biology: (Biological Sciences) (Animal Biology) (Biochemistry) (Human Biology)	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, including the mandatory modules for Level 5 and Level 6 of the award (not the Dissertation/Project module) as specified on the award map.
Degree with honours Biology: (Biological Sciences) (Animal Biology) (Biochemistry) (Human Biology)	Passed a minimum of 360 credits with at least 90 credits at Level 5 or higher and a minimum of 120 credits at Level 6, as specified on the award map.
Integrated Masters Biology: (Biological Sciences) (Animal Biology) (Biochemistry) (Human Biology)	Passed a minimum of 480 credits with at least 90 credits at Level 5 or higher and a minimum of 120 credits at each of Level 6 and Level 7, including a dissertation or other substantial piece of independent work, as set out in the award map.

Classification

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

Degree with honours:

- Classification determined on the profile of the 120 credits attained at Level 5 and 120 credits at Level 6. Level 5 and Level 6 grades are weighted on a ratio of 1:2.
OR
- Classification determined on the profile of the 120 credits attained at Level 6 only
- Classification will be based on the weighted average grade together with a requirement for at least half of the Level 6 grades to be in the higher class.

Integrated Masters:

- Classification determined on the profile of the 120 credits attained at Level 6 and 120 credits at Level 7. Level 6 and Level 7 grades are weighted on a ratio of 1:2.
OR
- Classification determined on the profile of the 120 credits attained at Level 7 only.
- Classification will be based on the weighted average grade together with a requirement for at least half of the Level 7 grades to be in the higher class.

For further information on degree classification, see the [Taught Courses Regulatory Framework](#).

Please Note: The above methods apply to students entering Level 4 of three or four year degree programmes who commence Level 4 from September 2022 onwards.

20. Graduate destinations, employability, and links with employers

Graduate destinations

An increasing number of our students now go on to study for postgraduate awards and advice on following this pathway is included in our career's guidance within the school. There has also been an increase in those going on to a PGCE course and so into a teaching career. Many of our students have entered employment with direct links to their degree subject, for example those in technical or research posts. Others have chosen to use their transferrable graduate skills to gain employment outside of the biological sciences.

Careers of recent graduates include:

- Clinical research assistant
- Research technician
- Field engineer
- Research analyst
- Clinical trials data manager
- Wildlife Trust Reserves officer
- Education (e.g., teaching, lecturing)
- Further Study: MSc, MPhil, or PhD

Student employability

Careers advice is embedded in the curriculum at all levels. At Level 4, students are introduced to the Careers Service in BIOS 1201 Cell Biology, as part of the Science PDP scheme. This is followed up in BIOS 2200, with a more substantial careers session that

looks at career options and strategies. In this module one of the assignments takes the form of a job application, submission of a CV and an interview. Students are given the opportunity in most modules to develop skills relevant to employability. However, students also could take a Work Experience module at Level 5. Students will also record their practical skills in the Biological Science Skills Passport as a record to show prospective employers.

The University has developed a set of Graduate Attributes that will enable our graduates to have a positive impact on their own lives and those of others. These Graduate Attributes can be found in the University's [Learning and Teaching Policy](#). The University's [Careers and Employability Service](#) is available for all students and graduates, throughout their careers.

Links with employers

As a community-engaged university, the University of Worcester has strong partnerships with local, regional, and National organisations. To enhance the relevance of the course and maximise the employability of graduates, the school has brokered relationships with local employers to form the Biological Sciences Employer Liaison Group.

Membership of the Employer Liaison Group includes:

- Severn Biotech
- Worcestershire Acute Hospitals NHS Trust
- Avensys UK Ltd.
- Wye Valley NHS Trust
- Gloucestershire Hospitals NHS Foundation Trust
- Sequani Ltd.
- Malvern Cosmeceutics

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

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: Integrated Masters awards at Level 4, 5, 6 and 7

Table 7 heading for course title

Course Title: BSc (Hons)/MBiol: Biology: (Animal Biology), (Biochemistry), (Biological Sciences), (Human Biology)

Level 4

Table 86 level 4 award map template for BSc (Hons)/MBiol: Biology: (Animal Biology), (Biochemistry),(Biological Sciences), (Human Biology)

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
BIOL 1001	Cell Biology	30	M	None	Excl: BIOS1201
BIOL 1003	Health and Disease	30	M	None	Excl: BIOS 1203
BIOL 1005	Chemistry for the Life Sciences	15	M	None	Excl: 1205
BIOL 1002	Biological Diversity	30	M	None	Excl: BIOS 1200
BIOL 1006	Comparative Physiology	15	M	None	Excl: BIOS 1210

Single Honours Requirements at Level 4

Students must take 120 credits from the table above to include all mandatory modules.

Level 5

Table 9 level 5 award map for BSc (Hons)/MBiol: Biology: (Animal Biology), (Biochemistry),(Biological Sciences), (Human Biology)

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
Animal Biology / Biological Sciences pathway					
BIOL 2001	Project & Career Development	30	M	None	Excl: BIOS 2200, BIOS 2200E/BIOL2001E, BIOS 2400
BIOL 2010	Animal Behaviour	15	M	None	Excl BIOS 2010
BIOL 2005	Molecular Genetics and Conservation	30	M	BIOS 1201/BIOL 1001	Excl: BIOS 2100/BIOL 2006, BIOS 2201/BIOL 2004, BIOS 2202
BIOL 2008	Plant Biology	15	M	BIOS 1201/BIOL 1001	Excl BIOS 2040
ENMS 2104	Surveying Species and Habitats	15	M	None	None
BIOL 2007	Microbiology	15	O	BIOS 1201/BIOL 1001	Excl BIOS 2023
BIOL 2003	Work Experience	15	O	None	Excl BIOS 2003
BIOL 2014	Clinical Immunology	15	O	BIOS 1201/BIOL 1001, BIOS 1206/1005	None
CODE xxxx	Optional modules offered by the Language Centre/School of Education (codes LANG or UGTU)	15/30	O	NA	NA

Biochemistry / Human Biology Pathway					
BIOL 2001	Project & Career Development	30	M	None	Excl: BIOS 2200, BIOS 2200E/BIOL2001E, BIOS 2400
BIOL 2004	Molecular and Cellular Biology	30	M	BIOS 1201/BIOL 1001	EXCI: BIOS 2100/BIOL 2006, BIOS 2202/BIOL 2005, BIOS
BIOL 2011	Protein Structure and Function	15	M	BIOS 1201/BIOL 1001, BIOS 1206/BIOL 1005	Excl BIOS 2111
BIOL 2002	Systems Physiology 1	30	M	BIOS 1201/BIOS 1001, BIOS 1203/BIOL 1003	Excl BIOS 2106
BIOL 2007	Microbiology	15	O	BIOS 1201/BIOL 1001	Excl BIOS 2023
BIOL 2014	Clinical Immunology	15	O	BIOS 1201/BIOL 1001, BIOS 1206/1005	Excl BIOS 2110
BIOL 2003	Work Experience	15	O	None	Excl BIOS 2003
CODE xxxx	Optional modules offered by the Language Centre/School of Education (codes LANG or UGTU)	15	O	NA	NA

Requirements at Level 5

Students must take 120 credits in total drawn from the table above to include all mandatory modules, and one optional module - which can include up to 15 credits drawn from a range of Language Centre modules in: Academic English for native and non-native speakers of English and Teaching English as a Foreign Language (TEFL) and modules in Tutoring. Details of the available modules can be found here: <https://www.worcester.ac.uk/life/help-and-support/language-centre/optional-modules.aspx>

Level 6

Table 1810 level 6 award map for BSc (Hons)/MBiol: Biology: (Animal Biology), (Biochemistry),(Biological Sciences), (Human Biology)

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
Biological Sciences pathway					
BIOL 3002	Research Project	30	M	BIOS2200/BIOS 2400	Excl BIOS 3002
BIOL 3011	Physiological Ecology	15	M	None	Excl BIOS 3107
BIOL 3009	Genomics and Bioinformatics	15	M	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3109
BIOL 3005	Plant Development & Physiology	15	M	BIOS 2040/BIOL 2008	Excl BIOS 3041
BIOL 3026	Residential Biology Field Trip	15	M	None	None
BIOL 3010	Mammalian Reproduction	15	O	None	Excl BIOS 3010
BIOL 3012	Parasitology	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3112
BIOL 3014	Behavioural Ecology	15	O	None	Excl BIOS 3014
BIOL 3004	Pharmacology	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIO6 3106
BIOL 3019	Welfare and Ethics in Biology	15	O	None	None
BIOL 3020	Extension module in Biological Sciences	15	O	Any level 5 or 6 module achieving grade B- or above	Excl BIOS 3111

Single Honours Requirements at Level 6

Single Honours students must take 120 credits from the table above to include all mandatory modules and two optional modules.

Animal Biology pathway					
BIOL 3002	Research Project	30	M	BIOS2200/BIOS 2400	Excl BIOS 3002
BIOL 3010	Mammalian Reproduction	15	M	None	Excl BIOS 3010
BIOL 3011	Physiological Ecology	15	M	None	Excl BIOS 3107
BIOL 3019	Welfare and Ethics in Biology	15	M	None	None
BIOL 3014	Behavioural Ecology	15	M	None	Excl BIOS 3014
BIOL 3026	Residential Biology Field Trip	15	M	None	None
BIOL 3018	Current Topics in Zoology & Conservation	15	O	None	Excl BIOS 3501
BIOL 3009	Genomics and Bioinformatics	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3109
BIOL 3012	Parasitology	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3112
Single Honours Requirements at Level 6 Single Honours students must take 120 credits from the table above to include all mandatory modules plus one optional module.					
Human Biology pathway					
BIOL 3002	Research Project	30	M	BIOS2200/ BIOS 2400	Excl BIOS 3002
BIOL 3010	Mammalian Reproduction	15	M	None	Excl BIOS 3010
BIOL 3003	Systems Physiology II	30	M	BIOS 2106/BIOL 2002	Excl BIOS 3108
BIOL 3013	Biochemistry of Cancer	15	M	BIOS 2201/BIOL 2004	Excl BIOS 3113
BIOL 3009	Genomics and Bioinformatics	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3109
BIOL 3004	Pharmacology	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3106
BIOL 3012	Parasitology	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3112
BIOL 3020	Extension module in Biological Sciences	15	O	Any level 5 or 6 module achieving grade B- or above	Excl BIOS 3111

Single Honours Requirements at Level 6

Single Honours students must take 120 credits from the table above to include all mandatory modules plus two optional modules.

Biochemistry pathway					
BIOL 3002	Research Project	30	M	BIOS2200/ BIOS 2400	Excl BIOS 3002
BIOL 3013	Biochemistry of Cancer	15	M	BIOS 2201/BIOL 2004	Excl BIOS 3113
BIOL 3016	Clinical Biochemistry	15	M	BIOS 2201/BIOL 2004	Excl BIOS 3115 (Biochem only)
BIOL 3015	Metabolic Biochemistry	15	M	BIOS 2201/BIOL 2004	Excl BIOS 3115
BIOL 3009	Genomics and Bioinformatics	15	M	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3109
BIOL 3003	Systems Physiology II	30	O	BIOS 2106/BIOL 2002	Excl BIOS 3108
BIOL 3004	Pharmacology	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3106
BIOL 3012	Parasitology	15	O	BIOS 2201/BIOL 2004 or BIOS 2202/BIOL 2005	Excl BIOS 3112
BIOL 3020	Extension module in Biological Sciences	15	O	Any level 5 or 6 module achieving grade B- or above	Excl BIOS 3111

Single Honours Requirements at Level 6

Single Honours students must take 120 credits from the table above to include all mandatory modules plus two optional modules.

Level 7

Table 11 level 7 award map for BSc (Hons)/M Biol: Biology: (Animal Biology), (Biochemistry),(Biological Sciences), (Human Biology)

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
BIOS 4001	Research Methods for Integrated Masters	30	M	BIOS3002/BIOL 3002	None
BIOS 4002	Applied and Commercial Research	30	M	BIOS3002/BIOL 3002	None
BIOS 4003	Integrated Master's Dissertation in Biology (Biological Sciences) (Animal Biology) (Human Biology) (Biochemistry)	60	O	BIOS3002/BIOL 3002	None

Integrated Masters Requirements at Level 7

Integrated Masters students must take 120 credits from the table above to include all mandatory modules.