Programme Specification for BSc (Hons) Biological Sciences

1.	**Awarding institution/body**	University of Worcester
2.	**Teaching institution**	University of Worcester
3.	**Programme accredited by**	N/A
4.	**Final award**	BSc Hons
5.	**Programme title**	Biological Sciences
6.	**Pathways available**	Single Honours
7.	**Mode and/or site of delivery**	Standard taught programme
8.	**Mode of attendance**	Full time and part time
9.	**UCAS Code**	N/A
10.	**Subject Benchmark statement and/or professional body statement**	QAA Biosciences benchmark statement 2007 http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement-Biosciences.pdf
11.	**Date of Programme Specification preparation/ revision**	June 2015 November 15 updated pre-req for BIOS3106 commence 16/17. November 15 updated to Personal Academic Tutors and hyperlink update to Taught Courses Regulatory Framework.

12. Educational aims of the programme

This course has been designed for students who have completed higher education study in Biological Sciences up to the equivalent UK Level 5, and wish to 'top-up' to an Honours degree. It is particularly suitable for International students. Those from European Union countries might instead like to consider applying via the Direct Entry route to the Biology undergraduate degree course. Information is available at: http://www.worcester.ac.uk/courses/biology-bsc-hons.html

This course will enable students to gain skills in independent learning, analysis, synthesis and critical thinking, as well as facilitating engagement with the knowledge, concepts and principles appropriate to a level 6 Biological Sciences course. It has a high practical content so encourages the development of skills to increase employability. The unique Worcester science personal development planning (PDP) scheme is designed to support personal and career development.
In particular, the course aims to:

a) Provide students with the knowledge, skills and aptitudes appropriate to a level 6 Biological Sciences course.
b) Enable students to think independently, critically and analytically and to become independent learners
c) Enable students to develop competence in experimental skills appropriate to the Biological Sciences
d) Encourage students to develop a range of subject-specific and transferable skills appropriate to graduate employment and/or post-graduate study
e) Encourage students to appreciate the need for ethical standards and professional codes of conduct.
f) Provide a supportive learning environment which acknowledges and responds to the diversity of student backgrounds and experiences, and which allows students the opportunity to realise their full academic potential

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

On successful completion of the course, students will be able to:

a) demonstrate knowledge and understanding of a range of biological facts, concepts and principles appropriate to level 6 study
b) access information from a variety of sources and show proficiency in assessing, evaluating, analysing, and synthesising the scientific information and data;
c) communicate biological information and principles in an appropriate manner, employing skills of written, oral and visual communication, numerical analysis and information technology;
d) record data accurately, analyse and interpret those data and test hypotheses;
e) design, execute and critically evaluate the outcomes of investigations
f) demonstrate skills appropriate to an independent learner;
g) critically review current literature
h) demonstrate practical skills in laboratory work, and be able to work safely and appropriately
i) have an understanding of ethical and welfare issues related to Biological Sciences
j) plan, carry out and present a piece of hypothesis-driven work for an independent study in the biological sciences

Examples of learning, teaching and assessment methods used:
Opportunities for learning will be provided through lectures, practical work, directed reading (textbook and scientific papers), debate and discussion, seminars, personal research, video presentations and personal and group tutorials. In addition, there is an element of enquiry-based learning and students are expected to demonstrate a high level of independent reading in relation to the assessments.
Elements of the course will be delivered via Blackboard to enable blended learning. Students will be supported in the virtual learning environment through the provision of notes, extra reading material, and articles of interest and relevance to the modules. Interactive CD-ROM computer packages will also be used.

Assessment methods include practical reports, essays, portfolios, examinations, presentations (including poster presentations), case studies, a research proposal and a reflective exercise.

14. Assessment Strategy

The one-year Biological Sciences course aims to consolidate and build on the knowledge and attributes gained in the student's previous higher education studies and to develop autonomous and independent learners who possess a broad range of intellectual and transferable skills. In order to achieve these aims, a range of teaching techniques and of assessments is used. Please see the section above for the list of assessment methods used.
The module BIOS 3300 Development of level 6 Evaluative Skills is started in an induction week so that the students can develop an understanding of the standards required and begin to develop the necessary skills. This development will be supported by formative assessments. 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. 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.
The Biological Sciences follow the University of Worcester Assessment Policy

http://www.worc.ac.uk/aqu/documments/AssessmentPolicy.pdf
All module outlines contain detailed assignment briefs and grading criteria which are, in most cases, specific for that particular assignment. The module BIOS3300 Development of level 6 Evaluative Skills includes sessions on how to make good use of this information.

15. Programme structures and requirements

Award map template for Single Honours

Course Title: BSc (Hons) Biological Sciences	Date of preparation/revision March 2015

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***
BIOS3012	Animal Movement	15	M	BIOS1210	None
BIOS3041	Plant Development and Physiology	15	M	BIOS2040	None
BIOS3052	Forensic DNA Analysis	15	O	BIOS2100 or BIOS2201 or BIOS2202	None
BIOS3106	Pharmacology	15	O	BIOS2100 or BIOS2201 or BIOS2202	None
BIOS3108	Systems Physiology 2.	30	O	BIOS2106	None
BIOS 3114	Research Methods and Research Project	30	M	None	None
BIOS3116	Clinical Biochemistry	15	O	BIOS2201, BIOS3115	None
BIOS3300	Development of Evaluation Skills for Research	15	M	None	BIOS3114
ENVS3004	Environmental Pollution and its Management	15	M	ENVS1011, ENVS1010, ENVS2011	None

Single Honours Requirements at Level 6

Single Honours students must take 120 credits from the table above to include BIOS3114, BIOS3300, BIOS3041 and ENVS3004 plus further modules from the table above to the total of 30 credits.

16. QAA and Professional Academic Standards and Quality

The course has been developed with reference to the QAA Biosciences Benchmark Statement (2007) which has been used to inform course outcomes and skills

This award is located at level 6 of the FHEQ.

17. Support for students

- A specially designed module, BIOS 3300 Development of level 6 evaluative skills, will deliver the study skills and approaches to learning required by an independent learner at level 6. A large part of this module will be delivered in an induction week before semester 1 begins in order to develop skills that will be required early in the course.

- All students have an academic tutor who is available to offer them guidance and support. Students see their academic tutor twice each semester. All tutors also have an open door policy.

- The Disability & Dyslexia Service provides advice and support for students who have mental health difficulties, dyslexia, sensory or physical impairments and other difficulties. There is a dedicated Assistant Disability Coordinator for students with sensory impairments. Advice is also available on access to technology such as voice recognition and text-to-speech software. Much of the support provided is funded through the Disabled Students' Allowance (DSA).

  More information about the Disability & Dyslexia Service can be found at:
  http://www.worcester.ac.uk/student-services/disability-and-dyslexia.htm

  Student services information is available at:
  http://www.worcester.ac.uk/student-services/index.htm

- A Virtual Learning Environment (Blackboard Learning System) provides module-specific material, documents, activities, videos, etc.

- Detailed module outlines show the planned teaching activities, attendance requirements, assessment briefs, assessment criteria and reading lists as well as other module-specific information.

- The Student Course Handbook (published on an annual basis) provides students with detailed information about the whole course

18. Admissions

Admissions Policy

Students must have successfully completed the first three years of a four year degree course (or the first two years of a three year degree course) in Biological Sciences or a related subject.

The University aims to be accessible; it is committed to widening participation and encouraging diversity in the student population. The Institute of Science and the Environment works closely with central student support services, including the Admissions Office, the Disability and Dyslexia Service and the International Office, 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 learners. Students entering via non-standard entry routes may be interviewed.

Entry requirements

Students must have successfully completed the first three years of a four year degree course (or the first two years of a three year degree course) or study equivalent to 120 credits at Level 5, in Biological Sciences or a related subject.
International applicants will also be expected to have IELTS score of 6.0 or above (with no less than 5.5 in each component).

This course is particularly suitable for International students. Those from European Union countries might instead like to consider applying via the Direct Entry route to the Biology undergraduate degree course. Information is available at:
http://www.worcester.ac.uk/courses/biology-bsc-hons.html

Admissions procedures

Please refer to the Admissions Office or
http://www.worc.ac.uk/courses/howtoapply/475.html

Admissions/selection criteria

All applicants will be considered on an individual basis. Students should have enough credits in a suitable range of Biological Sciences (or related subjects) modules to meet the University of Worcester equivalents at levels 4 and 5.

Please refer to the Admissions office or:
http://www.worc.ac.uk/courses/howtoapply/6638.html

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19. Methods for evaluating and improving the quality and standards of teaching and learning

Mechanisms for review and evaluation of teaching, learning and assessment, the curriculum and outcome standards include:

- Student module evaluation and feedback
- An Annual Evaluation Report completed by the Head of Biological Sciences
- Periodic Review and revalidation including external scrutiny
- External Examiners' Reports
- Academic staff annual appraisal
- Staff Development Away Days and other events
- Staff research and scholarly activity
- Staff review and development.

- ISE Policy on Approval (Module Outlines and Assignment Briefs) and Moderation of Student Work

Committees with responsibility for monitoring and evaluating quality and standards:

- ISE Quality Assurance Committee
- Biological Sciences Course Management Committee
- Academic Quality Standards and Quality Enhancement Committee
- ISE and UW Ethics Committees

Mechanisms for gaining student feedback on the quality of teaching and their learning experience:

- Module feedback questionnaires
- Student Academic Representatives (StARs)
- Biological Sciences Course Management Committee
- Meetings with module tutors and academic tutor
- National Students Survey
- Induction, exit and other ad hoc surveys

20. 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 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.
- Some modules have attendance requirements
- 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 5 days of the due date will have work marked, but the grade will be capped at D- unless an application for mitigating circumstances is accepted.
- Students who submit work later than 5 days but within 14 days of the due date will not have work marked unless they have submitted a valid claim of mitigating circumstances.
- For full details of submission regulations see Taught Courses Regulatory Framework.

Retrieval of failure

- Students are entitled to resit failed assessment items for any module that is awarded a fail grade, unless the failure was due to non-attendance.
- Reassessment items that are passed are graded 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).

- A student who fails 90 credits or more due to non-submission will be required to withdraw from the University.
- Students who pass less than 90 credits but have submitted all items of assessment will be required to retake modules.

Requirements for Awards

Award	Requirement
Degree (non-honours)	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
Degree with honours	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

Classification

Credit awarded through Recognition of Prior Learning will count towards the attainment of the award, but will not count towards the classification of the award **i.e. classification will be based on level 6 only.**

For further information on honours degree classification, see the Taught Courses Regulatory Framework.

21. Indicators of quality and standards

External examiners have consistently stated that our standards are the equivalent of standards in other UK higher education institutions. They are particularly impressed by the level of feedback on offer to students.

The following comments on our Biology course were received from two external examiners for the 2013/14 academic year.

"The overwhelming impression is that students are receiving a high standard of provision". The students are provided with "vital experience of the scientific method, and a taste of hands-on research. All the evidence is that the staff work enormously hard to provide interesting and viable projects, and appropriate training."

"Overall the students are exposed to an excellent range of modules, including up to date material and skills."

The University underwent a QAA Institutional Audit in March 2011. The audit confirmed that confidence can be placed in the soundness of the institution's current and likely future management of the academic standards of its awards and the quality of the learning opportunities available to students. The audit team highlighted several aspects of good practice, including the student academic representative (StARs) initiative, the proactive approach which supports the student experience for disabled students, the comprehensiveness of the student online environment (SOLE), the wide range of opportunities afforded to students to enhance their employability, the institution's commitment to enhancement, and the inclusive approach to working with its collaborative partners.

Student opinion:
In the UW student survey involving the first and second year students, the Biological Sciences courses received very good scores. The category 'Teaching on my course' had

student agreement (agree and strongly agree) for an outstanding mean value of 95.6%, with Personal Academic Tutors at 86.25 %.and Assessment and Feedback at 76.7% agreement.

Research quality in the Institute of Science and the Environment:

In the recent Research Excellence Framework (the system for assessing the quality of research in UK higher education institutions) published on 18th December 2014, the University of Worcester was the most improved university in the UK with the Biological Sciences making a major contribution to the research outputs. More than a third of the total work submitted at Worcester is now classified as world leading or internationally excellent.

22. Graduate destinations, employability and links with employers

Graduate destinations

An increasing number of our students now go on to study for Masters or PhD awards and advice on following this pathway is included in our careers guidance within the Institute. There has also been an increase in those going on to a PGCE course and so Into a teaching career. Some of our students have entered employment with direct links to their degree subject, for example those in technical or research posts. Others have used their transferrable graduate skills to gain employment in seemingly unrelated areas. Career opportunities include:

- Government Agencies (e.g. Environment Agency & English Nature)
- Non-governmental Organisations (e.g. Greenpeace & Local Wildlife Trusts)
- Local Government (e.g. Environmental Health)
- Technical Posts (e.g. Microbiological monitoring & medical technicians, water
- companies, hospital technicians)
- Education (e.g. teaching, lecturing & research)
- Other Graduate Professions (e.g. accountancy & management)
- Further Study: M.Sc., M.Phil or Ph.D.

Student employability

- Students are given the opportunity in most modules to develop work- based skills
- A range of employability events and activities is available to students each academic year via Worcester Weeks
- Volunteering opportunities, short-term work placements and job opportunities are advertised via the Institute's intranet.
- Career guidance is available through University of Worcester Career Advisory Service and periodic Career Fairs are organised by Student Services

Links with employers

We have links with the National Pollen and Aerobiology Research unit, Worcestershire and Herefordshire Wildlife Trusts and Birmingham Sea Life Centre, with whom Biology staff liaise to arrange Independent Studies and employment opportunities. We also have links with West Mercia Police and Hereford and Worcester County Council. These links have provided work experience opportunities, facilities for Independent studies, and careers advice from those in the relevant fields.

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 the module outlines and the course handbook provided to all students at the start of the course. The accuracy of the information contained in this document is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.