

## Programme Specification for BSc (Hons) Ecology

This document applies to Academic Year 2019/20 onwards

1.	<b>Awarding institution/body</b>	University of Worcester
2.	<b>Teaching institution</b>	University of Worcester
3.	<b>Programme accredited by</b>	N/A
4.	<b>Final award</b>	BSc (Hons)
5.	<b>Programme title</b>	Ecology
6.	<b>Pathways available</b>	Major, joint, minor
7.	<b>Mode and/or site of delivery</b>	Standard taught programme
8.	<b>Mode of attendance</b>	Full time or part time
9.	<b>UCAS Code</b>	DN49 joint Ecology and Environmental Science CC31 joint Animal Biology and Ecology C193 joint Biology and Ecology
10.	<b>Subject Benchmark statement and/or professional body statement</b>	<a href="#">QAA Benchmark : Earth Sciences, Environmental Sciences and Environmental Studies</a> , October 2014
11.	<b>Date of Programme Specification preparation/ revision</b>	April 2015 (Single/Major/Minor Honours), July 2015 (PAT) August 2017 - AQU amendments, January 2018 title change to ENV53100, BIOS2010 pre-reqs updated February 2018 – AQU removal of single honours May 2018 – title change for ENV51011 June 2018 – change of excluded combinations for ENV52010 (effective from Sept 2019) August 2018 – AQU amendments, regulations and updates throughout. December 2018 – updated LO tables, LOs and combined subject degrees, award maps, removal of old Section 19 and 21 and re-numbering remaining sections February 2019 – AQU corrections throughout.

### 12. Educational aims of the programme

In the Ecology programme students are provided with the opportunity to follow an intellectually challenging and contemporary programme of study at Honours degree level. In addition to the teaching of the theoretical and factual aspects of the subject, there are numerous opportunities for fieldwork, both local and regional, and additionally an optional foreign residential field trip. These enable the learning and practise of key skills and enhancement of employability. The course prepares students for entry into a wide range of potential occupations.

The course aims to:

1. Provide a rigorous and disciplined curriculum of organized, current knowledge and practice relating to the discipline of 'Ecology' so that students develop a sound understanding of its principles, theories and applications;
2. Offer students opportunities to develop a range of subject-specific and transferable skills to support their undergraduate studies and to prepare them for employment and/or post-graduate study;
3. Provide a supportive learning environment which acknowledges and responds to the diversity of student backgrounds and experiences, and which allows students the opportunity to realize their academic potential;
4. Enable students to develop a capacity for sustained independent work and ability to work with others as part of a team;
5. Develop students' skills of reflection, critical analysis, information literacy and communication in a range of formats;
6. Develop graduates who are ethically and environmentally responsible.

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

#### Knowledge and understanding of:

Learning Outcome N°	On successful completion of the named award, students will be able to:	Module Code/s
1	Demonstrate knowledge and understanding of the ecology of species, populations, communities, ecosystems and landscapes, the interrelationship between these and the application of such knowledge;	ENVS 1100 ENVS 2011 ENVS 3103 ENVS 3106 ENVS 3100  ENVE 3001/2
2	Demonstrate knowledge and understanding of species, habitat and landscape conservation issues, ecosystem services and the management thereof and an appreciation for the need for continual evidence-based reflection and integration;	ENVS 2010 ENVS 2011 ENVS 3100 ENVS 3103 ENVS 3106  ENVE 3001/2
3	Use skills and have the ability to collect, manage, analyse and interpret biological data and conduct long-term monitoring of wildlife, habitats and the wider environment;	ENVS 1013 ENVS 1100 ENVS 1102 ENVS 2010 ENVS 2011  ENVE 3001/2
3	Understand methods of acquiring, interpreting and analysing information with a critical understanding of the applications of ecology;	ENVS 1013 ENVS 1100 ENVS 1102 ENVS 2010 ENVS 2011 ENVS 3103 ENVS 3016  ENVE 3001/2
4	Understand a range of management approaches and methods appropriate for effective management of ecology at local, regional, national and international scales;	ENVS 1100 ENVS 2011 ENVS 3100 ENVS 3102 ENVS 3103 ENVS 3106 ENVS 3107  ENVE 3001/2

5	Understand a range of approaches and methods appropriate to embark on a career in ecology.	ENVS 1013 ENVS 1100 ENVS 1102 ENVS 2011 ENVS 3102 ENVS 3103 ENVS 3105 ENVS 3106 ENVS 3107  ENVE 3001/2
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**Cognitive and intellectual skills:**

<b>Learning Outcome N°</b>	<b>On successful completion of the named award, students will be able to:</b>	<b>Module Code/s</b>
6	Recognize and use subject-specific theories, paradigms, concepts and principles;	ENVS 1013 ENVS 1100 ENVS 1102 ENVS 2010 ENVS 2011 ENVS 3102 ENVS 3103 ENVS 3105 ENVS 3106 ENVS 3107  ENVE 3001/2
7	Search for, analyse, synthesize, summarize and present information critically, including past research;	ENVS 2010 ENVS 2011 ENVS 3100 ENVS 3102 ENVS 3103 ENVS 3105 ENVS 3106 ENVS 3107  ENVE 3001/2
8	Collect and integrate several lines of evidence to formulate and test hypotheses to inform a decision making process;	ENVS 2010 ENVS 2011 ENVS 3100 ENVS 3102 ENVS 3103 ENVS 3105 ENVS 3106 ENVS 3107  ENVE 3001/2
9	Apply knowledge and understanding to complex and multidimensional problems in familiar and unfamiliar contexts;	ENVS 2010 ENVS 2011 ENVS 3100 ENVS 3102 ENVS 3103 ENVS 3105 ENVS 3106 ENVS 3107  ENVE 3001/2
10	Contribute to debates on ecological, environmental, conservation and associated issues,	ENVS 2011 ENVS 3100 ENVS 3102 ENVS 3103 ENVS 3106 ENVS 3107  ENVE 3001/2

**Practical skills relevant to employment:**

<b>Learning Outcome N°</b>	<b>On successful completion of the named award, students will be able to:</b>	<b>Module Code/s</b>
11	Plan and undertake field and supporting laboratory investigations and analyse data using appropriate techniques in a safe and responsible manner, completing and responding to risk assessment, rights of access, relevant health and safety regulations and sensitivity to the impact of investigations on the environment and stakeholders;	ENVS 1103 ENVS 1013 ENVS 1100 ENVS 1102 ENVS 2010 ENVS 2011 ENVS 2303  ENVE 3001/2
12	Design and/or evaluate ecological management, species recovery and restoration plans for conservation management of species, communities and landscapes and ecosystem services;	ENVS 2011 ENVS 3103 ENVS 3105 ENVS 3106 ENVS 3107  ENVE 3001/2
13	Apply methods of prioritisation and manage limited resources effectively and optimally, recognise moral/ethical dilemmas and issues;	ENVS 2011 ENVS 3102 ENVS 3103 ENVS 3105 ENVS 3106 ENVS 3107  ENVE 3001/2
14	Communicate effectively with individuals and organisations.	ENVS 2010 ENVS 2011 ENVS 3100 ENVS 3105 ENVS 3107

**Transferable/key skills:**

<b>Learning Outcome N°</b>	<b>On successful completion of the named award, students will be able to:</b>	<b>Module Code/s</b>
15	Communicate effectively with a variety of audiences in written, oral, numerical and graphical forms;	ENVS 1100 ENVS 2010 ENVS 2011 ENVS 3100 ENVS 3103 ENVS 3105 ENVS 3107  ENVE 3001/2
16	Appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and laboratory;	ENVS 1013 ENVS 1102 ENVS 1103 ENVS 2010 ENVS 2303  ENVE 3001/2
17	Prepare, process, interpret and present data using appropriate quantitative and qualitative techniques and packages;	ENVS 2010 ENVS 2011 ENVS 3100  ENVE 3001/2
18	Use the internet as critically a source of information, recognise and respect various views and opinions, judge	ENVS 2010 ENVS 2011 ENVS 3100

	the authority and credibility of sources and have well-developed information literacy;	ENVS 3102 ENVS 3103 ENVS3105 ENVS 3106 ENVS 3107  ENVE 3001/2
19	Identify individual and collective goals and responsibilities and perform efficiently and adaptably in ways appropriate to the task;	ENVS 2010 ENVS 2011 ENVS 3100 ENVS 3102 ENVS 3103 ENVS 3105  ENVE 3001/2
20	Develop skills for self-management, identification and attainment of targets and a flexible approach to study and work;	ENVS 1103 ENVS 2010 ENVS 2011 ENVS 3103  ENVE 3001/2
21	Recognise, appreciate and conform to codes of professional conduct as laid-down by sector professional organisations.	ENVS 1103 ENVS 2010 ENVS 3102 ENVS 3105 ENVS 3107  ENVE 3001/2

**Learning outcomes and combined subject degrees (joint, major and minor pathways):**

- **Joint Pathway**  
Students following a joint pathway will have met the majority of the learning outcomes for the subject, although the range of knowledge and discipline specific understanding in terms of options or specialisms will be more restricted than for a major Honours student.
- **Major Pathway**  
Students following a major pathway will have met the learning outcomes for the subject but will have focused their studies in relation to subject options or specialisms.
- **Minor Pathway**  
Students following a minor pathway will have met some of the learning outcomes for the subject (as indicated by the modules studied), and will have focused the development of their knowledge, understanding and subject specific skills in particular aspects of the discipline.

**Learning, Teaching, and Assessment**

At the University of Worcester, we ensure that students are afforded the opportunity to attain their full academic potential. We enable the development of independent learning capabilities that will equip them for lifelong learning, whilst enhancing future employment success. The University experience will be based on an integral mixture of independent study, a wide variety of taught sessions, and academic support through the personal academic tutoring system. With regular meetings with the academic tutor students will be able to reflect on progress and build up a profile of skills, achievements and experiences that will enhance employability.

**Teaching**

Teaching will be delivered through a combination of lectures, field excursions, site visits, laboratory practicals, seminars, interactive workshops, and guest lectures from industry and sector specialists. Interactive workshops take a variety of formats and are intended to enable the application of learning through computer-based activities, discussion and small group activities.

Seminars enable the discussion and development of understanding of topics covered in lectures, and laboratory and field practicals are focused on developing subject specific skills and applied individual and group project work. Talks by ecological practitioners are also an important part of the course, relating theory to practice.

At Worcester students will receive essential training in a variety of field and laboratory techniques using state-of-the-art equipment and facilities. Continuing technological advances means the discipline rapidly changes, and at Worcester, due to an impressive research profile students will be trained in highly advanced and cutting-edge techniques.

### **Contact time**

In a typical week students will have around 12-16 contact hours of teaching. The precise contact hours will depend on the optional modules selected. In the final year there will normally be slightly less contact time in order to do more independent study.

Typically, class contact time will be structured around:

- 6-8 hours of lectures, interactive workshops, seminars
- 3-4 hours of supervised lab practicals
- 3-4 hours of field trips

### **Independent self-study**

In addition to the contact time, students are expected to undertake around 22 hours of personal self-study per week. Typically, this will involve reading journal articles and books, working on individual and group projects, undertaking research in the library and online, preparing coursework assignments, and preparing for examinations.

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**

The teaching team have expertise and knowledge which are closely matched to the content of modules on the course. This includes professors in atmospheric science, senior academics with strong research backgrounds, and guest lecturers from outside the University (e.g. Marine Conservation Society, Environment Agency, Worcestershire Wildlife Trust). Practical sessions are fully supported by a dedicated team of technicians, which serves to enhance the student experience. Postgraduate research students with expertise in aspects of a module are also invited to contribute to teaching under the supervision of module leaders.

Teaching is informed by research and consultancy, and more than 85% of lecturers have a higher education teaching qualification and/or are Fellows of the Higher Education Academy.

The small class sizes in Ecology allows students to get to know their lecturers well, which ultimately benefits learning. It also means that students get to know all of their peers on the course and become part of a vibrant student community.

### **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' assessments, which count towards the overall module grade.

To enhance the employability of our graduates there is a focus on coursework that is directly related to real-world situations. A wide range of assessment types are provided, including: practical reports, scientific reports, essays, site evaluations, management plans, critiques, poster and oral presentations, in-class tests, and examinations. However, there is less emphasis on in-class tests and formal examinations.

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 as follows:

<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>
1 Essay	1 Essay	1 Research dissertation
6 Scientific reports	2 Scientific reports	3 Scientific reports
2 Practical reports	2 Project reports	2 Practical reports
2 Group Presentations	1 Research proposal	1 Field notebook
1 Exam (1 hour)	4 Practical tests/exams	2 Oral presentations
1 Video podcast	1 Student-led seminar	1 Essay
	1 Oral presentation	2 In-class tests
	2 In-class tests	1 Planning exercise
	1 Exam (1.5hrs)	1 Case study evaluation

### **Feedback**

Feedback is intended to support learning and students are encouraged to discuss it with their personal academic tutor and module tutors as appropriate. Feedback on practice assessments and on formal assessments undertaken by coursework is routinely provided. Feedback on examination performance is available upon request from the module leader.

## **14. Assessment Strategy**

External Examiners have commended the Environmental Sciences team on the excellent and innovative range of assessment types which are fully appropriate to the learning outcomes. Furthermore, there is recognition that the assessment items have strong links to future employment. Assessments are designed to test knowledge and understanding and the ability to apply these to a range of circumstances, and to demonstrate ability to evaluate, criticise and problem solve. As students' progress through the levels, more advanced knowledge and skills are required to complete more complex assignments such as management plans, site evaluations, modelling reports.

Assessment points occur throughout each semester after an introductory period for each module. All modules include both formative and summative assessments. Formative assessments may take a number of different formats and be conducted informally in class practical and field situations or more formally in classrooms or via the VLE. Modules throughout the course use a range of summative assessment methods to ensure that students have an opportunity to excel and none are disadvantaged through over-reliance on one type. Most modules have two summative assessment items. Students are notified at the start of the semester about the contents of their assessments to allow them to organise their study effectively. Details of assessment briefs are included in the module handbooks distributed at the beginning of the semester and are also available on the Blackboard VLE. Additional supporting resources are also made available on Blackboard in many instances.

Assessment types include formal examinations, essays, practical files, field notebooks, writing and evaluation of management plans, short tests and GIS exercises. Additional opportunities are provided within the modules for formative assessment and may take the form of multiple choice questions, quizzes, discussion, seminars and question-and-answer sessions. Use is also made of various forms of formative assessment.

Throughout all modules, assessments are made in line with assessment criteria (given as subject-specific criteria and descriptors) and in accordance with the University's Assessment Policy and make full use of the UW grade descriptors when awarding grades. A table demonstrating how assessment methods at each level are mapped to modules is included in the course handbook.

The external examiner noted that 'detailed and useful written feedback is provided to the students on their performance'.

## 15. Programme structures and requirements

<b>Course Title: BSc Ecology and Environmental Science Joint Honours</b>	
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### Level 4 (Table shows modules from BOTH subjects)

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes
			Joint Hons		
ENVS 1011	Introduction to Environmental Science	30	M	None	None
ENVS 1012	Environmental Change – Past and Present	30	M	None	ENVS 1101 excluded
ENVS 1013	Classification and Species Identification	15	M	None	ENVS 1200
ENVS 1100	Introduction to Ecology	15	M	None	None
ENVS 1102	Basis of Biological Surveying	15	M	None	ENVS 1200
ENVS 1103	Environmental Skills and Applications	15	M	None	None

#### Joint Honours Requirements at Level 4

Joint Honours students in Ecology and Environmental Science must take 120 credits identified in the table above.

Key	
	Ecology modules
	Environmental Science modules

**Level 5 (does not show module from second subject)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))			Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes
			Major	Joint	Minor		
ENVS 2010	Research Practice and Professional Development	30	M	O	-	None	BIOS2200, GEOG2110 (excluded)
ENVS 2011	Ecology – Individuals to Ecosystems	30	M	M	M	ENVS 1100	ENVS 2100 (excluded)
ENVS 2303	Field Techniques and Identification Skills	15	O	O	O	ENVS 1100	None
ENVS 2104	Ecology of Fresh Waters	15	O	O	O	ENVS 1100	None
GEOG 2113	Geographical Information Systems	15	O	O	O	None	GEOG 3113
BIOS 2010	Animal Behaviour	15	O	O	O	None	None
ENVS 2005	Work Experience	15	O	O	O	None	None

**Joint, Major and Minor Honours Requirements at Level 5**

Students following Joint Honours pathways can adjust their studies at level 5 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

**Major Pathway Requirements at Level 5**

Major Pathway students must take at least 60 and no more than 90 credits from the table above to include ENVS2010 **AND** ENVS2011.

**Joint Pathway Requirements at Level 5**

Joint Pathway Ecology and Environmental Science students must take at least 45 credits and no more than 75 credits from the table above.

**A: if intending to take an Independent study in Ecology** students must take ENVS 2010 and ENVS 2011.

**B: if intending to take an Independent study in Environmental Science:** students must take ENVS 2011.

**Minor Pathway Requirements at Level 5**

Minor Pathway students must take at least 30 credits and no more than 60 credits from the table above to include ENVS2011.

**Level 6 (does not show module from second subject)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))			Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
			Major	Joint	Minor		
ENVE 3001/2	Independent Study in Ecology	30	M	O	-	ENVS 2010	<b>OR</b> ENSC 3001/2 <b>OR</b> JOIN 3001/2 Any other Independent Study module excluded. Direct Entry students will take ENVS 3116
ENVS 3103	Restoration Ecology	15	M	M	O	ENVS 2011 or ENVS 2100	None
ENVS 3105	Project Management	15	M	O	-	None	None
ENVS 3106	Landscape Ecology	15	M	M	M	ENVS 2011 or ENVS 2100	None
ENVS 3100	Mediterranean Environments Field Course	15	O	O	O		None
ENVS 3107	Zoo-based Conservation	15	O	O	O	None	None
ENVS 3102	Environmental Impact Assessment	15	O	O	O	ENVS 2011 or ENVS 2100	None
ENVS 3112	International Conservation	15	O	O	O	ENVS 2011 or ENVS 2100	None
GEOG 3114	Applied GIS and Remote Sensing	15	O	O	-	GEOG 2113	None
GEOG 3113	Geographical Information Systems	15	O	O	-		Exclusions: GEOG 2113
ENVS 3116	Research Methods and Research Project for Ecology (for direct entry students only)	30	O	O	-	None	Exclusions: ENVS 3301/3302

**Direct entry students into Level 6**

Students must take ENVS 3116 (30 credits) in place of ENVE 3301/2, **AND** ENVS3103 (15 credits), **AND** ENVS3106 (15 credits) **AND** a minimum of one of either ENVS 3100 (15 credits), **OR** ENVS 3105 (15 credits).

**Joint, Major and Minor Honours Requirements at Level 6**

Students following pathways in two subjects can adjust their studies at level 6 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

**Major Pathway Requirements at Level 6**

Major Pathway students must take 75 or 90 credits from the table above to include ENVE 3001 **OR** ENVE 3002 (30 credits), **AND** ENVS3103 (15 credits), **AND** ENVS3106 (15 credits), **AND** one from either ENVS 3100 (15 credits) **OR** ENVS3105 (15 credits),

**Joint Pathway Requirements at Level 6**

Joint Pathway students must take either 45, 60 or 75 credits (to make at least 105 credits over levels 5 and 6 in the subject, and no more than 135 credits over levels 5 and 6 in the subject ) from the table above to include: ENVS3103 (15 credits) **AND** ENVS3106 (15 credits).

Joint pathway students must take one Independent Study (or equivalent), either in this subject, ENSC 3001/2 if in Environmental Science, or take JOIN 3001/2 where an Independent Study covers both joint subjects.

**Minor Pathway Requirements at Level 6**

Minor pathway students must take either 30 or 45 credits to include ENVS3106 (15 credits), plus optional modules drawn from the table above.

**Credit requirements for awards involving two subjects**

In determining whether an award derived from two subjects is Joint Honours (subject 1 **and** subject 2) or Major/Minor Honours (subject 1 **with** subject 2) credits taken in each subject at levels 5 and 6 will count as follows:

<b>Subject 1</b>	<b>Subject 2</b>	<b>Award</b>
120	120	Joint Hons
135	105	Joint Hons
150	90	Major/minor Hons
165	75	Major/minor Hons
180	60	Major/minor Hons

<b>Course Title: BSc Animal Biology and Ecology Joint Honours</b>	
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**Level 4 (Table shows modules from BOTH subjects)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes
			Joint Hons		
ENVS 1013	Classification and Species Identification	15	M	None	ENVS 1200
ENVS 1100	Introduction to Ecology	15	M	None	None
ENVS 1102	Basis of Biological Surveying	15	M	None	ENVS 1200
ENVS 1103	Environmental Skills and Applications	15	M	None	None
BIOS 1200	Animal Diversity	30	M	None	None
BIOS 1201	Cell Biology	30	M	None	None

**Joint Honours Requirements at Level 4**

**Joint Honours students in Animal Biology and Ecology** must take 120 credits identified in the table above.

Key	
	Ecology modules
	Animal Biology modules

**Level 5 (does not show module from second subject)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))			Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes
			Major	Joint	Minor		
ENVS 2010	Research Practice and Professional Development	30	M	O	-	None	BIOS2200, GEOG2110 (excluded)
ENVS 2011	Ecology – Individuals to Ecosystems	30	M	M	M	ENVS 1100	ENVS 2100 (excluded)
ENVS 2303	Field Techniques and Identification Skills	15	O	O	O	ENVS 1100	None
ENVS 2104	Ecology of Fresh Waters	15	O	O	O	ENVS 1100	None
GEOG 2113	Geographical Information Systems	15	O	O	O	None	GEOG 3113
BIOS 2010	Animal Behaviour	15	O	O	O	None	None
ENVS 2005	Work Experience	15	O	O	O	None	None

**Joint, Major and Minor Honours Requirements at Level 5**

Students following Joint Honours pathways can adjust their studies at level 5 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

**Major Pathway Requirements at Level 5**

Major Pathway students must take at least 60 and no more than 90 credits from the table above to include ENVS2010 **AND** ENVS2011.

**Joint Pathway Requirements at Level 5**

Joint Pathway Animal Biology and Ecology students must take at least 45 credits and no more than 75 credits from the table above.

**A: if intending to take an Independent study in Ecology** students must take ENVS 2010 and ENVS 2011.

**B: if intending to take an Independent study in Animal Biology:** students must take BIOS 2200 and ENVS 2011.

**Minor Pathway Requirements at Level 5**

Minor Pathway students must take at least 30 credits and no more than 60 credits from the table above to include ENVS2011.

**Level 6 (does not show module from second subject)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))			Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
			Major	Joint	Minor		
ENVE 3001/2	Independent Study in Ecology	30	M	O	-	ENVS 2010	<b>OR</b> ENSC 3001/2 <b>OR</b> JOIN 3001/2 Any other Independent Study module excluded. Direct Entry students will take ENVS 3116
ENVS 3103	Restoration Ecology	15	M	M	O	ENVS 2011 or ENVS 2100	None
ENVS 3105	Project Management	15	M	O	-	None	None
ENVS 3106	Landscape Ecology	15	M	M	M	ENVS 2011 or ENVS 2100	None
ENVS 3100	Mediterranean Environments Field Course	15	O	O	O		None
ENVS 3107	Zoo-based Conservation	15	O	O	O	None	None
ENVS 3102	Environmental Impact Assessment	15	O	O	O	ENVS 2011 or ENVS 2100	None
ENVS 3112	International Conservation	15	O	O	O	ENVS 2011 or ENVS 2100	None
GEOG 3114	Applied GIS and Remote Sensing	15	O	O	-	GEOG 2113	None
GEOG 3113	Geographical Information Systems	15	O	O	-		Exclusions: GEOG 2113
ENVS 3116	Research Methods and Research Project for Ecology (for direct entry students only)	30	O	O	-	None	Exclusions: ENVS 3301/3302

**Direct entry students into Level 6**

Students must take ENVS 3116 (30 credits) in place of ENVE 3301/2, **AND** ENVS3103 (15 credits), **AND** ENVS3106 (15 credits) **AND** a minimum of one of either ENVS 3100 (15 credits), **OR** ENVS 3105 (15 credits).

**Joint, Major and Minor Honours Requirements at Level 6**

Students following pathways in two subjects can adjust their studies at level 6 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

**Major Pathway Requirements at Level 6**

Major Pathway students must take 75 or 90 credits from the table above to include ENVE 3001 **OR** ENVE 3002 (30 credits), **AND** ENVS3103 (15 credits), **AND** ENVS3106 (15 credits), **AND** one from either ENVS 3100 (15 credits) **OR** ENVS3105 (15 credits),

**Joint Pathway Requirements at Level 6**

Joint Pathway students must take either 45, 60 or 75 credits (to make at least 105 credits over levels 5 and 6 in the subject, and no more than 135 credits over levels 5 and 6 in the subject ) from the table above to include: ENVS3103 (15 credits) **AND** ENVS3106 (15 credits).

Joint pathway students must take one Independent Study (or equivalent), either in this subject, BIOS 3001/2 if in Animal Biology, or take JOIN 3001/2 where an Independent Study covers both joint subjects.

**Minor Pathway Requirements at Level 6**

Minor pathway students must take either 30 or 45 credits to include ENVS3106 (15 credits), plus optional modules drawn from the table above.

**Credit requirements for awards involving two subjects**

In determining whether an award derived from two subjects is Joint Honours (subject 1 **and** subject 2) or Major/Minor Honours (subject 1 **with** subject 2) credits taken in each subject at levels 5 and 6 will count as follows:

<b>Subject 1</b>	<b>Subject 2</b>	<b>Award</b>
120	120	Joint Hons
135	105	Joint Hons
150	90	Major/minor Hons
165	75	Major/minor Hons
180	60	Major/minor Hons

<b>Course Title: BSc Biology and Ecology Joint Honours</b>
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**Level 4 (Table shows modules from BOTH subjects)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))	Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes
			Joint Hons		
ENVS 1013	Classification and Species Identification	15	M	None	ENVS 1200
ENVS 1100	Introduction to Ecology	15	M	None	None
ENVS 1102	Basis of Biological Surveying	15	M	None	ENVS 1200
ENVS 1103	Environmental Skills and Applications	15	M	None	None
BIOS 1200	Animal Diversity	30	M	None	None
BIOS 1201	Cell Biology	30	M	None	None

**Joint Honours Requirements at Level 4**

**Joint Honours students in Biology and Ecology** must take 120 credits identified in the table above.

Key	
	Ecology modules
	Biology modules

**Level 5 (does not show module from second subject)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))			Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes
			Major	Joint	Minor		
ENVS 2010	Research Practice and Professional Development	30	M	O	-	None	BIOS2200, GEOG2110 (excluded)
ENVS 2011	Ecology – Individuals to Ecosystems	30	M	M	M	ENVS 1100	ENVS 2100 (excluded)
ENVS 2303	Field Techniques and Identification Skills	15	O	O	O	ENVS 1100	None
ENVS 2104	Ecology of Fresh Waters	15	O	O	O	ENVS 1100	None
GEOG 2113	Geographical Information Systems	15	O	O	O	None	GEOG 3113
BIOS 2010	Animal Behaviour	15	O	O	O	None	None
ENVS 2005	Work Experience	15	O	O	O	None	None

**Joint, Major and Minor Honours Requirements at Level 5**

Students following Joint Honours pathways can adjust their studies at level 5 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

**Major Pathway Requirements at Level 5**

Major Pathway students must take at least 60 and no more than 90 credits from the table above to include ENVS2010 **AND** ENVS2011.

**Joint Pathway Requirements at Level 5**

Joint Pathway Biology and Ecology students must take at least 45 credits and no more than 75 credits from the table above.

**A: if intending to take an Independent study in Ecology** students must take ENVS 2010 and ENVS 2011.

**B: if intending to take an Independent study in Biology:** students must take BIOS 2200 and ENVS 2011.

**Minor Pathway Requirements at Level 5**

Minor Pathway students must take at least 30 credits and no more than 60 credits from the table above to include ENVS2011.

**Level 6 (does not show module from second subject)**

Module Code	Module Title	Credits (Number)	Status (Mandatory (M) or Optional (O))			Pre-requisites (Code of Module required)	Co-requisites/ exclusions and other notes*
			Major	Joint	Minor		
ENVE 3001/2	Independent Study in Ecology	30	M	O	-	ENVS 2010	<b>OR</b> ENSC 3001/2 <b>OR</b> JOIN 3001/2 Any other Independent Study module excluded. Direct Entry students will take ENVS 3116
ENVS 3103	Restoration Ecology	15	M	M	O	ENVS 2011 or ENVS 2100	None
ENVS 3105	Project Management	15	M	O	-	None	None
ENVS 3106	Landscape Ecology	15	M	M	M	ENVS 2011 or ENVS 2100	None
ENVS 3100	Mediterranean Environments Field Course	15	O	O	O		None
ENVS 3107	Zoo-based Conservation	15	O	O	O	None	None
ENVS 3102	Environmental Impact Assessment	15	O	O	O	ENVS 2011 or ENVS 2100	None
ENVS 3112	International Conservation	15	O	O	O	ENVS 2011 or ENVS 2100	None
GEOG 3114	Applied GIS and Remote Sensing	15	O	O	-	GEOG 2113	None
GEOG 3113	Geographical Information Systems	15	O	O	-		Exclusions: GEOG 2113
ENVS 3116	Research Methods and Research Project for Ecology (for direct entry students only)	30	O	O	-	None	Exclusions: ENVS 3301/3302

**Direct entry students into Level 6**

Students must take ENVS 3116 (30 credits) in place of ENVE 3301/2, **AND** ENVS3103 (15 credits), **AND** ENVS3106 (15 credits) **AND** a minimum of one of either ENVS 3100 (15 credits), **OR** ENVS 3105 (15 credits).

**Joint, Major and Minor Honours Requirements at Level 6**

Students following pathways in two subjects can adjust their studies at level 6 to take more modules in one subject or can maintain an equally balanced programme of modules in each subject. The precise award title (Joint Hons or Major/Minor Hons) depends on the total number of credit achieved in each subject at levels 5 and 6 – for further information see the table at the end of this document.

**Major Pathway Requirements at Level 6**

Major Pathway students must take 75 or 90 credits from the table above to include ENVE 3001 **OR** ENVE 3002 (30 credits), **AND** ENVS3103 (15 credits), **AND** ENVS3106 (15 credits), **AND** one from either ENVS 3100 (15 credits) **OR** ENVS3105 (15 credits),

**Joint Pathway Requirements at Level 6**

Joint Pathway students must take either 45, 60 or 75 credits (to make at least 105 credits over levels 5 and 6 in the subject, and no more than 135 credits over levels 5 and 6 in the subject ) from the table above to include: ENVS3103 (15 credits) **AND** ENVS3106 (15 credits).

Joint pathway students must take one Independent Study (or equivalent), either in this subject, BIOS 3001/2 if in Biology, or take JOIN 3001/2 where an Independent Study covers both joint subjects.

**Minor Pathway Requirements at Level 6**

Minor pathway students must take either 30 or 45 credits to include ENVS3106 (15 credits), plus optional modules drawn from the table above.

**Credit requirements for awards involving two subjects**

In determining whether an award derived from two subjects is Joint Honours (subject 1 **and** subject 2) or Major/Minor Honours (subject 1 **with** subject 2) credits taken in each subject at levels 5 and 6 will count as follows:

<b>Subject 1</b>	<b>Subject 2</b>	<b>Award</b>
120	120	Joint Hons
135	105	Joint Hons
150	90	Major/minor Hons
165	75	Major/minor Hons
180	60	Major/minor Hons

## 16. QAA and Professional Academic Standards and Quality

This course design has been informed by the benchmark statement: [Earth Science, Environmental Sciences, Environmental Studies](#) (ES3) (2014) QAA 10/14.

Hence the course incorporates the aims, objectives, learning outcomes, skills and practices advocated within this benchmark statement. The course follows the QAA and UW guidelines of work experience. The course operates at levels 4, 5 and 6 of the Framework for HE Qualifications.

This award is located at level 6 of the FHEQ.

## 17. Support for students

- Ecology students will encounter a wide range of learning experiences, including lectures, seminars, group work, laboratory and field practical sessions, workshops, and tutorials.
- All new students attend a week-long induction at the start of the course to familiarise them with the course structures and expectations. Presentations from current and past students (where possible) are included to help welcome the newcomers and additionally the 'Environmental and Conservation Society' is invited to sessions to explain their activities and encourage new membership.
- All students have a personal academic tutor who offers specific support and guidance enabling them to become effective learners understanding the requirements of their course in terms of knowledge and understanding, skills development and assessment requirements. Students are required to attend tutorials with their tutors twice per semester at level 4 and 5 and at level 6 they have frequent meetings with their Independent Study tutor (who may be the same person). Grades and feedback from assessments are discussed together with strategies to improve learning outcome attainments. Students are encouraged to actively reflect on their achievements and to document their evidence in a Personal Development Plan and maintain a current CV. In addition career planning is formally addressed at Level 5 and through the University's Careers Advisory Service. Frequent visits and talks from practitioners in the environmental sector help to reinforce aspects of career planning.
- All tutors have an 'open door policy', that is, there are no restrictions on the number of times a tutor will meet and discuss issues with their tutees. Additionally, subject tutors offer additional tutorials if required.
- Students have access to a range of specialist resources including the GIS, Mapping and Visualization Suite, GPS equipment, and hydrological and meteorological monitoring equipment, field and analytical equipment.
- A comprehensive course handbook is provided online which details essential information about the course, availability of modules, etc.
- All modules provide module handbooks for the students as paper copies and also on the Blackboard VLE. These include planned teaching activity, attendance requirements, assessment brief(s), assessment criteria and reading lists.
- The VLE 'Blackboard' has a section dedicated to the Environmental subject areas (Environmental Science and Ecology). This acts as a notice board for events, employment and volunteering activities. Details of Course Management Committees, Annual Evaluation and External Examiners' reports are posted here for the students to read. Past Independent Studies in the subject area are available as is information on staff details and STAR contacts. Additionally there are discussions fora posted on the site
- All students following this course will be provided with a study guide on Blackboard, and have access to study skills assistance provided by the University.

- Library and ILS inductions and support are provided at Induction or as the students require by the ILS staff.
- Library, IT, media and print support is provided by Information and Learning Services (ILS) staff through desk services and the support of professionally-qualified librarians including a dedicated Academic Liaison Librarian for the Institute of Science and the Environment (ISE). The Academic Liaison Team offers a portfolio of professional information services, including information literacy programmes for cohorts and one-to-one support, both in-person and online.
- Students have the opportunity to study abroad for one semester under the ERASMUS scheme in the second year.
- The Careers Service provides information, advice and training opportunities for career planning in addition to such opportunities offered within the course.
- Equal opportunities via the Disability & Dyslexia Service provide advice and support for students who have mental health difficulties, dyslexia, sensory or physical impairments or 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). <http://www.worcester.ac.uk/student-services/disability-and-dyslexia.htm>
- There are a range of student support services, including financial and accommodation advice. <http://www.worcester.ac.uk/student-services/index.htm>

## 18. Admissions

### Admissions Policy

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.

Admission to the course is in Semester 1 only of the academic year.

### 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).

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>

For GCSE, passes must include at least Science (double award) or the separate science subjects, Mathematics and English.

At A level science subjects (includes Environmental Science/Studies) and/or Geography and/or Geology must have been passed. Biology must have been passed at least at AS level.

For students studying joint honours, the same qualifications are required.

See [Admissions Policy](#) for other acceptable qualifications.

## 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 (*see course code below*)

DN49 Joint Ecology and Environmental Sciences

CC31 Joint Animal Biology and Ecology

C193 Joint Biology and Ecology

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

Students holding offers of places on the courses will be invited to an Applicant Day when the student can experience a 'taster' of what is offered on the courses.

## Admissions/selection criteria

The Admissions Tutors will pay particular attention to personal statements, references and predicted or actual grades. In particular, they will be looking for evidence of an interest in the subject, some level of involvement with environmental organisations and a clear explanation as to why the student is keen to pursue Environmental Science at degree level.

## 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 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 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 please see the Taught Courses Regulatory Framework.

### Retrieval of failure

- Students are entitled to re-sit failed assessment items for 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

- Students at Level 4 will be permitted to progress to Level 5 when they have passed at least 90 credits at Level 4.
- Students at Level 5 will be permitted to progress to Level 6 when they have passed at least 210 credits including at least 90 credits at Level 5.
- A student who fails 90 credits or more due to non-submission will be required to withdraw from the University.

### Requirements for Awards

Award	Requirement
CertHE	Passed 120 credits at Level 4 or higher
DipHE	Passed a minimum of 240 credits with at least 90 credits at Level 5 or higher
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, including the mandatory modules for Level 5 and Level 6 of the award (not the Independent Study module) as specified on the award map.
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

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 Taught Courses regulatory Framework.

## 20. Graduate destinations, employability and links with employers

**Student employability** is considered to be one of the key elements of the course. The Employable Worcester Graduate Framework, which encourages students throughout their course to reflect on employability, personal development and their interaction with process of learning, is at the core of teaching and learning activities. The course seeks to increase student employability throughout all three years. The acquisition of practical and transferable skills and experience in the environmental field are considered to be major contributors to student employability. The teaching and practice of skills are embedded within the modules. Students'

progress is reviewed by Personal Academic Tutors during the tutorials and the requirement to attend tutorials is linked to modules. This is supported by group employability tutorials in ENVS2010. Students also have the opportunity to take a Work Experience module at Level 5; this adheres fully to the university guidance on placement learning, which in turn is informed by the relevant University and QAA policies.

**Graduate Destinations:**

Students undertaking the outgoing ecology degrees have been pursued a variety of careers, including:

Reserves officers – Wildlife Trusts

Game-keeping officer - British Association for Shooting and Conservation

Ecologists - for various ecological consultancies

Environmental Scientists – various environmental consultancies

Countryside officers – City and County Councils

Postgraduate teacher training

A variety of Masters courses at this and other Universities

A range of studies leading to PhD qualifications

Feedback from graduates indicates that the focus of acquiring practical skills and the application of theory has been invaluable in securing employment.

**Links with employers** are maintained by visits to a variety of establishments and presentations by practitioners (for example Worcestershire Wildlife Trusts Reserves, Gloucester Motorway Service Station, Bristol Zoo, Swift Ecology) and contacts with organizations such as the local Wildlife Trust and the Forestry Commission. Students are encouraged to join subject associations such as the Institute of Environmental Management and Assessment and the Institute of Ecology and Environmental Management to establish links and pursue career opportunities.

**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 study guides and course handbook.