

# **University of Plymouth**

Faculty of Science and Engineering  
School of Biological and Marine Sciences

## **Programme Specification**

**MSc Zoo Conservation Biology (2678)**

September 2019

## 1. **MSc Zoo Conservation Biology**

**Final award title** MSc Zoo Conservation Biology

**UCAS code** not applicable

**JACS code** D328

2. **Awarding Institution:** University of Plymouth

**Teaching institution(s):** University of Plymouth

3. **Accrediting body(ies)** None

## 4. **Distinctive Features of the Programme and the Student Experience**

This programme provides a unique opportunity for the students to engage with zoo biology as it relates to conservation. It is the oldest and best established of the two qualifications of its type within Europe receiving an educational commendation in 2006 from the British and Irish Association of Zoos and Aquariums (BIAZA). It attracts a wide range of national and international students and as a result has a vibrant and engaged student body. As this programme is delivered in partnership with Whitley Wildlife Conservation Trust (WWCT) it ensures that the students are immersed within a professional context throughout the programme (taught and research elements alike). Experts in the field at both Plymouth and WWCT provide students with opportunities to work within the captive wild animal environments across the UK and Europe as well as *in situ* conservation projects worldwide. Expertise within both animal welfare and animal behaviour provide valuable opportunity to apply cutting edge scientific learning to assist in the development of the zoo environment, and management of the animals within it.

Students are provided with the opportunity to engage practically with innovative management tools both remotely (e.g. electronic stud books) and directly (e.g. enrichment and behavioural modification)

## 5. **Relevant QAA Subject Benchmark Group(s)**

There are currently no QAA subject benchmarks for Masters Biosciences or related subject. However, this programmes builds on the QAA Bioscience benchmarks for honours programmes into Level 7 and the documentation has been written with explicit reference to the SEEC (2010) guidelines for Level 7 (master's) programmes:

SEEC (2010) Credit level descriptors for Higher Education. *Southern England*

Consortium for Credit Accumulation and Transfer. See [www.seec.org.uk](http://www.seec.org.uk)

## 6. Programme Structure

### 6.1 Programme structure for 2016/17 onwards

BIO5131 Postgraduate Research Skills and Methods [S1]	ANIM5005 Zoo Animal Behaviour and Welfare [S1]	ANIM5006 Contemporary Zoo Management [S1]
ANIM5007 Small Population Conservation [S2]	ANIM5008 Conservation Ecology and Society [S2]	ANIM5009 Zoo Animal Health, Nutrition and Management [S2]
BIO505 Research Project [Other]		

There are no electives

### 6.2 Awards

Postgraduate Certificate: requires the successful completion of modules worth at least 60 credits, of which at least 50 credits must be at level 7

Postgraduate Diploma: requires the successful completion of modules worth at least 120 credits, of which at least 100 credits must be at Level 7

Master's Degree (MSc): requires the successful completion of modules worth a minimum of 180 credits, of which at least 150 must be at Level 7 and which must include the dissertation/major project module.

To qualify for an award a student must have achieved the required number of credits as above and have satisfied any programme-specific requirements. The credit achieved from a pass in the dissertation/major project may be used to contribute towards the exit award of Postgraduate Certificate/Diploma. However, this may only normally apply where the dissertation/major project has been undertaken at the University.

A student will be awarded a Postgraduate Certificate or Diploma with Distinction provided that s/he has achieved a credit-weighted average mark of 70% or above across all the modules.

A student will be awarded a Postgraduate Certificate or Diploma with Merit provided that s/he has achieved a credit-weighted average mark of 60% or above across all the modules.

A student will be awarded a Master's degree with Distinction provided that s/he has achieved a credit-weighted average mark of 70% or above across all modules (including the dissertation) and the mark for the dissertation module is not less than 70%.

A student will be awarded a Master's degree with Merit provided that s/he has achieved a credit-weighted average mark of 60% or above across all modules (including the dissertation) and the mark for the dissertation is not less than 60%.

Where a student withdraws or is required to withdraw from the programme on which s/he is registered, the Award Board will confer the highest award to which s/he is entitled.

#### **6.4 Rationale for change, in brief.**

The proposed changes to the structure are intended to reflect the modern relationships between zoos and conservation initiatives, many of which have extended beyond the zoo into *in situ* environments. There has also been an increased use of diagnostic techniques, science communication and technology-based management protocols since the inception of the programme and which are now represented within the learning.

### **7. Programme Aims**

These aims are written with explicit reference to the SEEC (2010) guidelines for Level 7 (master's) programmes:

SEEC (2010) Credit level descriptors for Higher Education. *Southern England Consortium for Credit Accumulation and Transfer*. See [www.seec.org.uk](http://www.seec.org.uk)

To provide students with:

- the knowledge, understanding and skills required for effective management within the area of zoological conservation;
- an awareness of the complexity, scope and inter-relationships of the scientific, ethical and commercial issues involved zoological conservation;
- ability to analyse complex situations and apply critical, analytical and problem solving skills to synthesise innovative responses and to deal responsibly with unpredictability;
- skills in information gathering, interpretation, critical analysis and evaluation and the formulation of recommendations in a professional context;
- practical and IT skills appropriate to zoological conservation;
- professional communication and interpersonal skills;
- ability to design and self-manage a research project; and
- skills of planning and management of learning that will enable them to continue to develop professionally after the programme has been completed.

### **8. Programme Intended Learning Outcomes**

The learning outcomes for this programme are scaffolded such that they address the QAA descriptors for specialised/advanced study master's:

<http://www.qaa.ac.uk/en/Publications/Documents/Masters-degree-characteristics.pdf>  
pp.12-14

### **8.1. Knowledge and understanding**

On successful completion graduates should have developed:

1. a deep and systematic understanding of knowledge in specialised/applied areas of zoo biology and conservation and can work with theoretical/research-based knowledge at the forefront of this academic discipline;
2. an awareness and ability to manage the implications of ethical dilemmas and work pro-actively with others to formulate solutions within *in situ* and *ex situ* animal environments;
3. a comprehensive understanding of techniques/methodologies applicable to their own work (theory or research-based)

### **8.2. Cognitive and intellectual skills**

On successful completion graduates should have developed:

1. the critical awareness to undertake analysis of complex, incomplete or contradictory areas of knowledge communicating the outcome effectively;
2. an ability to synthesise, with critical awareness, information concerning captive wild animal environments and conservation projects in a manner that may be innovative, utilising knowledge or processes from the forefront of the discipline/practice;
3. a level of conceptual understanding that will allow them to evaluate critically research, advanced scholarship and methodologies and argue alternative approaches; and
4. initiative and originality in problem solving;
5. an ability to act autonomously in planning and implementing tasks at a professional or equivalent level within the zoo/conservation professions, making decisions in complex and unpredictable situations.

### **8.3. Key and transferable skills**

On successful completion graduates should have developed the ability to:

1. work effectively as a leader or member of a group, in order to clarify tasks and make appropriate use of the capacities of group members, and to negotiate and handle conflict with confidence;
2. use full range of learning resources;
3. be reflective on their own and others' functioning in order to improve practice;
4. manage information such that they can competently undertake research tasks with minimum guidance;
5. be an independent and self-critical learner, guiding the learning of others and managing own requirements for continuing professional development;
6. engage confidently in academic and professional communication with others, reporting on action clearly, autonomously and competently; and
7. solve problems, having an independent learning ability required for continuing professional study, making professional use of others where appropriate.

### **Employment related skills**

On successful completion graduates should have developed:

1. knowledge, understanding and skills required for effective management within the area of zoological conservation;
2. an ability to work within, and provide information to, a wide range of communities and organisations; and
3. professional communication and interpersonal skills.

### **8.4. Practical skills**

On successful completion graduates should have developed:

1. an ability to apply skills, being able to operate in complex and unpredictable, possibly specialised contexts, and has an overview of the issues governing good practice;
2. autonomy in skill use, being able to exercise initiative and personal responsibility in professional practice; and
3. technical expertise, having the technical expertise to perform smoothly with precision and effectiveness; and can adapt skills and design or develop new skills or procedures for new situations.

## **9. Admissions Criteria, including APCL, APEL and DAS arrangements**

The Programme Leader, in conjunction with the Admissions Tutor, will use the criteria below as guides in making admission decisions. Wherever possible, established relationships or equivalencies to other international qualifications will be used in making decisions. However, the admissions policy for this course is based upon the principle that students will be admitted if we believe that they can benefit from the experience, and this principle will be used to make decisions where equivalencies are not available.

Students admitted to the MSc course would normally be expected to have a good Honours degree in a relevant science subject e.g. biology, environmental sciences and zoology. Students with lower qualifications (minimum HND or equivalent) but substantial relevant work experience will also be considered for entry, subject to interview by the Programme Leader.

Candidates with existing achievements may be considered for exemption from specific modules under the University guidelines for accreditation of prior learning (APCL) and assessment of prior experiential learning (APEL). The Director of Postgraduate Programmes has responsibility for approving exemption under these guidelines. His/her decision will be made after consulting with the Programme Leader and Module Leaders.

Overseas students for whom English is not the first language will be expected to demonstrate proficiency in English with minimum overall IELTS score 6.5 with at least 5.5 in each element in line with University criteria

- Provision will be made for disabled students by reasonable adjustments where safety and educational standards are not prejudiced.
- If a student has a particular disability which means that they are disadvantaged by specific assessment tasks, alternatives will be considered such as *viva voce* examinations.
- The Disability Assist Service (DAS) offers a range of enhancements and should be contacted for further information.

#### **10. Progression criteria for Final and Intermediate Awards**

Not applicable

#### **11. Exceptions to Regulations**

None

#### **12. Transitional Arrangements**

All transitional arrangements are made as general principles. Students may opt to have discussions with the Programme Leader to negotiate options other than those presented here.

*ANIM5004 Zoo Organisation and Business Management* (20 cr) [S1] from 2016/17 this module will be re-named *ANIM5006 Contemporary Zoo Management*. However this module will still be recognised as having parity to *ANIM5004*.

*ANIM5003 Animal Metabolism and Nutrition* as of 2016 this module will be discontinued. Part-time students enrolled at this point will be able to complete *ANIM5008 Conservation Ecology and Society* and *ANIM5009 Zoo Animal Health, Nutrition and Management* to gain full credit. Students that have failed to complete *ANIM5003* only will be permitted to enrol on the course and re-sit course work, lectures will continue to be provided within the 3<sup>rd</sup> year of the BSc Animal Behaviour and Welfare. *ANIM5003* will not be offered for enrolment of students in 2016/17 and will be removed permanently following successful completion of all 2015/16 enrolled students.

*ANIM504 Applied Animal Behaviour Management* will be changed to *ANIM5005 Zoo Animal Behaviour and Welfare* for S1 2016/17. Although there are some changes to the content this new course will have parity with *ANIM504*.

*ANIM506 Animal Conservation* will be discontinued from 2015/16 and new students will not be able to enrol on it for 2016/17. Existing students may opt to take either *ANIM5007 Small Population Management* or *ANIM5008 Conservation Ecology and*

*Society* in its place. Either of these courses may be enrolled upon for those students who have failed to complete ANIM506 only and who wish to undertake 20 credits of study to complete their MSc.

*ANIM505 Animal Health & Welfare* will be re-named *ANIM5009 Zoo Animal Health, Nutrition and Management*. Students will be able to transition between these two modules.

### 13. Mapping and Appendices:

#### 13.1. ILOs against Modules Mapping

Programme Learning Outcome	Related Core Modules
<b>Knowledge and understanding</b>	
a deep and systematic understanding of knowledge in specialised/applied areas and/across areas and can work with theoretical/research-based knowledge at the forefront of their academic discipline	ANIM5005 Zoo Animal Behaviour and Welfare ANIM5006 Contemporary Zoo Management ANIM5007 Small Population Conservation ANIM5008 Conservation Ecology and Society ANIM5009 Zoo Animal Health, Nutrition and Management BIO5131 Postgraduate Research Skills and Methods BIO505 Research Project
an awareness and ability to manage the implications of ethical dilemmas and work pro-actively with others to formulate solutions	ANIM5006 Contemporary Zoo Management ANIM5008 Conservation Ecology and Society BIO5131 Postgraduate Research Skills and Methods
a comprehensive understanding of techniques/methodologies applicable to their own work (theory or research-based)	BIO5131 Postgraduate Research Skills and Methods BIO505 Research Project ANIM5005 Zoo Animal Behaviour and Welfare ANIM5007 Small Population Conservation ANIM5009 Zoo Animal Health, Nutrition and Management
<b>Cognitive and Intellectual skills</b>	



<b>Programme Learning Outcome</b>	<b>Related Core Modules</b>
the critical awareness to undertake analysis of complex, incomplete or contradictory areas of knowledge communicating the outcome effectively	All, but particularly BIO505 Research Project and ANIM5005 Zoo Animal Behaviour and Welfare
an ability to synthesise, with critical awareness, information in a manner that may be innovative, utilising knowledge or processes from the forefront of their discipline/practice	All, but particularly BIO505 Research Project; ANIM5005 Zoo Animal Behaviour and Welfare; ANIM 5008 Conservation Ecology and Society
a level of conceptual understanding that will allow them to evaluate critically research, advanced scholarship and methodologies and argue alternative approaches	All
initiative and originality in problem solving	All but particularly BIO505 Research Project
an ability to act autonomously in planning and implementing tasks at a professional or equivalent level, making decisions in complex and unpredictable situations	All, but particularly ANIM5006 Contemporary Zoo Management; BIO5131 Postgraduate Research Skills and Methods; ANIM5007 Small Population Conservation
<b>Key and transferable skills</b>	
work effectively with a group as a leader or member, in order to clarify tasks and make appropriate use of the capacities of group members, and to negotiate and handle conflict with confidence	ANIM5005 Zoo Animal Behaviour and Welfare ANIM5006 Contemporary Zoo Management
use full range of learning resources	All
be reflective on own and others' functioning in order to improve practice	ANIM5005 Zoo Animal Behaviour and Welfare; ANIM5006 Contemporary Zoo Management; ANIM 5008 Conservation Ecology and Society
manage information such that they can competently undertake research tasks with minimum guidance	BIO5131 Postgraduate Research Skills and Methods; BIO505 Research Project; ANIM5005 Zoo Animal Behaviour and Welfare;
be an independent and self-critical learner, guiding the learning of others and managing own requirements for continuing professional development	All

<b>Programme Learning Outcome</b>	<b>Related Core Modules</b>
engage confidently in academic and professional communication with others, reporting on action clearly, autonomously and competently	All, but particularly ANIM5005 Zoo Animal Behaviour and Welfare; ANIM5006 Contemporary Zoo Management
solve problems, having an independent learning ability required for continuing professional study, making professional use of others where appropriate	All
<b>Employment related skills</b>	
knowledge, understanding and skills required for effective management within the area of zoological conservation.	All modules, but particularly ANIM5006 Contemporary Zoo Management; ANIM5007 Small Population Conservation; ANIM5008 Conservation Ecology and Society; ANIM5009 Zoo Animal Health, Nutrition and Management
professional communication and interpersonal skills	All
<b>Practical skills</b>	
an ability to apply skills, being able to operate in complex and unpredictable, possibly specialised contexts, and has an overview of the issues governing good practice.	All
autonomy in skill use, being able to exercise initiative and personal responsibility in professional practice	BIO505
technical expertise, having the technical expertise to perform smoothly with precision and effectiveness; and can adapt skills and design or develop new skills or procedures for new situations	ANIM5005 Zoo Animal Behaviour and Welfare; BIO505 Research project; ANIM5007 Small Population Conservation

**13.2. Assessment against Modules Mapping**

					Oral assessment and presentation	
Module code	Scientific review	Scientific report/Dissertation	Management/Project Plan	Management Report	Group Presentation	Individual Presentation
<i>Core modules</i>						
Zoo Animal Behaviour and welfare						
Zoo Animal Health, Nutrition and Management						
Conservation Ecology and Society						
Small Population Conservation						
Contemporary Zoo Management						
BIO5131 Postgraduate Research Skills and Methods						
BIO505 Research Project						

## Skills against Modules Mapping

	Analysis	Synthesis	Evaluation	Application	Group working	Learning resources	Self-evaluation	Management of information	Autonomy	Communications	Problem solving
Contemporary Zoo Management	*	*	*	*	*	*		*	*	*	*
Zoo Animal Behaviour and welfare	*		*	*	*		*	*		*	*
Zoo Animal Health, Nutrition and Management	*	*				*		*		*	*
Small Population Conservation	*	*	*	*				*		*	
Conservation Ecology and Society	*	*	*	*				*		*	
Postgraduate research skills & methods (BIO5131)	*	*	*	*		*		*		*	*
Research project (BIO505)	*	*	*	*		*	*	*	*	*	*