

# **Programme Specification: Undergraduate For students starting in Academic Year 2024/2025**

## **1.Course Summary**

Name of programme & award title with UCAS code	Zoology [C309]
Awarding Institution	Aberystwyth University
Individual Accreditation(s)	Accredited by the Royal Society of Biology for the purpose of meeting, in part, the academic and experience requirement of membership and Chartered Biologist (CBiol).
Final Award	Master in Biology
Date of Publication	September 2024
QAA Subject Benchmark	<b>Information provided by Department of Life Sciences</b> Biosciences

How this information might change: Please read the important information at <u>https://www.aber.ac.uk/en/study-with-us/ug-studies/terms-conditions/</u>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

# 2: Duration

Programme	Years
Zoology [C309]	4

## **3: Educational aims of the programme**

#### Information provided by Department of Life Sciences

Students will develop their interest and knowledge in the biological sciences with specialisation in Zoology.

The scheme will develop the intellectual and practical skills of the student in preparation for employment in the zoological sciences and the wider range of disciplines open to the graduate biologist.

It will provide the skills necessary to allow students to adapt and respond to change, to engage in life-long learning, and to think creatively.

The scheme will develop in students an appreciation of the social responsibilities of graduates in biological sciences in general, and in the zoological sciences in particular.

The overall aim of the scheme is to provide graduates with the skills and knowledge to meet and exceed the generic standards given in the QAA Biosciences Benchmark Statement, with a particular focus on the subject specific statements relating primarily to organisms but also including statements from ecology and environmental biology.

## 4: Intended learning outcomes

#### Information provided by Department of Life Sciences

By the end of their programme, all students are expected to be able to demonstrate the listed learning outcomes relating to knowledge and understanding, intellectual skills and professional practical skills / Discipline Specific Skills.

# 5: Knowledge and understanding

#### Information provided by Department of Life Sciences

A1 Describe, discuss and understand the key biological concepts and phenomena relevant to Zoology confidently, accurately and in detail, using appropriate terminology.

A2 Be aware of the full breadth of Zoology, from molecular to cellular, and from organism to ecosystem, encompassing the full diversity of taxonomic groups.

A3 Engage with literature to develop insight into Zoology and its specialised sub-disciplines.

A4 Appreciate the contribution of Zoology to the innovations that characterise the modern world, and the potential of Zoology graduates from this field to develop sustainable solutions to current and future challenges.

A5 Stay up to date with advances in Zoology, its subdisciplines, and related fields, including aspects of sustainability, and appreciate the fluid nature of knowledge that evolves as new findings emerge.

#### Learning and Teaching

Student development towards these outcomes is promoted through a range of teaching activities. These include: small group tutorials, laboratory practical classes, one-to-one tutoring for the Research Project, lectures and problem-based learning scenarios. Additionally, feedback from assessments, literature-based research and computer-assisted learning also support the teaching and learning of these outcomes.

#### Assessment Strategies and Methods

Written examinations and coursework to include: Unseen examination, essays, multiple choice questions and short answer examinations, exercise-based and essay assignments, project work, practical laboratory reports, posters, the Research Project, and seminar presentations.

## 6: Skills and other attributes

#### Information provided by Department of Life Sciences

10.2.1 Intellectual Skills

By the end of their programme, all students are expected to be able to:

B1 Recognise the relationships and interfaces between Zoology and other subjects (both scientific and outside of the sciences), such that they are able to operate effectively in a multidisciplinary environment.

B2 Apply ethical awareness to working in the Biosciences generally, and Zoology specifically, appreciate the historical context of the subject and the societal impacts of advances in the Biosciences.

B3 Develop, integrate, synthesise and apply the systematic and broad understanding of relevant and state-of-the-art biological concepts to solve complex problems.

B4 Interrogate and integrate diverse sources of scientific literature alongside other information sources, in order to design and develop methods for investigation and analysis, including in areas at the forefront of knowledge and outside their current specialist knowledge.

B5 Discuss the background, context, methods, results and potential impact of a significant research project.

#### Learning and Teaching

Student development towards these outcomes is promoted through a range of teaching activities. These include: small group tutorials, laboratory practical classes, one-to-one tutoring for the Research Project, lectures and problem-based learning scenarios. Additionally, feedback from assessments, literature-based research and computer-assisted learning also support the teaching and learning of these outcomes.

#### Assessment Strategies and Methods

Written examinations and coursework to include: Unseen examination, essays, multiple choice questions and short answer examinations, exercise-based and essay assignments, project work, practical laboratory reports, posters, the Research Project, and seminar presentations.

10.2.2 Professional practical skills / Discipline Specific Skills

By the end of their programme, all students are expected to be able to:

C1 Apply knowledge and understanding of biological systems and methodologies to design experiments and to solve theoretical and practical problems, with awareness of appropriate controls, possible bias, ethics, and sustainability.

C2 Describe, document and enact safe working practices in terms of managing biological, chemical, laboratory or field-based risk, through knowledge-based risk assessments and practical activities.

C3 Select and carry out appropriate quantitative and qualitative practical (laboratory, field or computational) techniques to solve problems relevant to Zoology, including consideration of the theoretical basis and limitations of various techniques.

C4 Complete independent open-ended investigative work through a project/research-based assignment relevant to Zoology. This could be a laboratory or field-based project, an evidenced-based review, and/or collecting and evaluating data from a variety of sources.

C5 Collect qualitative and quantitative data from investigations relevant to Zoology and analyse and interpret these data to allow testing of hypotheses, contextualising of findings, presentation of findings, and suggestions for further lines of investigation.

C6 Develop advanced experimental and investigative skills as appropriate for the project.

#### Learning and Teaching

The teaching and learning of these skills are promoted during laboratory practical classes, small group tutorial classes, feedback from assessments, lectures, tutorials, student-led seminars, problem-based learning scenarios and case studies, literature-based research, computer-assisted learning and experimental research during the Research Project.

#### Assessment Strategies and Methods

Discipline-specific skills are assessed by a variety of methods throughout the degree scheme. Depending upon the module and the nature of the specific assessment, they are assessed using essay assignments, project work, practical laboratory reports, the Research Project, seminar presentations, seen examination essays, unseen examinations essays and unseen short answer examinations.

## 7: Transferable/Key skills

#### Information provided by Department of Life Sciences

By the end of their programme, all students are expected to be able to:

D1 Acquire skills in research and data analysis.

D2 Deploy mathematical and statistical concepts, processes and tools, such as the manipulation of equations and graphical and statistical analysis, to solve problems or evaluate data.

D3 Develop problem-solving and creative thinking skills.

D4 Develop a thorough grounding in information technology skills and use appropriate databases, computational techniques and tools to aid further understanding of and insight into biological processes.

D5 Demonstrate the ability to work independently.

D6 Demonstrate time-management and organisational skills, including the ability to meet deadlines.

D7 Develop the ability to express ideas and communicate effectively, in both written and oral forms, selecting appropriate content, media and methods for the audience, purpose and subject.

D8 Demonstrate self-motivation and self-reliance.

D9 Collaborate and work successfully and inclusively in a group environment, contributing positively and flexibly to team outputs.

D10 Act professionally, with due regard for legal, ethical and societal responsibilities, modelling good practice that promotes positive, sustainable and inclusive perceptions of the Biosciences and of Bioscientists.

D11 Project plan, including, as appropriate, evaluation of ethics, hazards, environmental effects, sustainability and appreciation of costs.

#### Learning and Teaching

Transferable/key skills are incorporated within modules and related to relevant assessments as appropriate. Students learn and develop skills through student and tutor-led seminars; problem-based learning scenarios; self-directed learning, oral presentations and experimental dissertation work. Students will be encouraged to undertake work experience, including access to the Year in Employment Scheme. Students will also have access to an optional study exchange programme which will also develop transferable skills of communication, personal development and career planning.

#### Assessment Strategies and Methods

The skills listed above are assessed using exercise-based and essay assignments, project work, practical laboratory reports, the Research Project, seminar presentations, unseen examinations essays and unseen short answer examinations.

## 8: Work-based learning (where appropriate)

#### Information provided by Department of Life Sciences

N/A

## 9: What is the structure of the programme?

#### Year 1 Core modules

Core (120 Credits)

Name	Module Code	Credits	Semester
Skills for Wildlife Scientists	<u>BR15700</u>	0	Semester 1
Skills for Wildlife Scientists	<u>BR15720</u>	20	Semester 2
Comparative Animal Physiology	<u>BR16700</u>	0	Semester 1
Comparative Animal Physiology	<u>BR16720</u>	20	Semester 2
Genetics, Evolution and Diversity	<u>BR17120</u>	20	Semester 1
Cell Biology	<u>BR17520</u>	20	Semester 1
Ecology and Conservation	<u>BR19320</u>	20	Semester 2
Microbial and Plant Diversity	<u>BR19920</u>	20	Semester 2

## Year 2 Core modules

#### Core (60 Credits)

Name	Module Code	Credits	Semester
Invertebrate Zoology	<u>BR25420</u>	20	Semester 1
Vertebrate Zoology	<u>BR26820</u>	20	Semester 2
Research Methods	<u>BR27500</u>	0	Semester 1
Research Methods	<u>BR27520</u>	20	Semester 2

## Year 2

**Options** Choose 60 credits. (Scheme Rule: no more than 40 credits of field courses from: BR23820, BR34920, BR30020, BR37720)

Name	Module Code	Credits	Semester

Arolygu Bywyd Gwyllt	<u>BG29620</u>	20	Semester 2
Animal Behaviour	<u>BR21620</u>	20	Semester 1
Evolution and Molecular Systematics	<u>BR21720</u>	20	Semester 1
Freshwater Biology	<u>BR22020</u>	20	Semester 2
Marine Biology	<u>BR22620</u>	20	Semester 1
Tropical Zoology Field Course	<u>BR23820</u>	20	Semester 2
Veterinary Health	<u>BR27120</u>	20	Semester 1
Researching Behavioural Ecology	<u>BR27320</u>	20	Semester 2
Wildlife Surveying	<u>BR29620</u>	20	Semester 2

## Year 3 Core modules

## Core (40 Credits)

Name	Module Code	Credits	Semester
Research Project	<u>BR36400</u>	0	Semester 1
Research Project	<u>BR36440</u>	40	Semester 2

## Year 3

**Options** Choose 80 credits. (Scheme Rule: no more than 40 credits of field courses from: BR23820, BR34920, BR30020, BR37720)

Name	Module Code	Credits	Semester
Marine Biology Field Course	<u>BR30020</u>	20	Semester 1
Global Biodiversity Conservation	<u>BR33420</u>	20	Semester 1

Parasitology	<u>BR33820</u>	20	Semester 2
Population and Community Ecology	<u>BR33920</u>	20	Semester 1
Wildlife Conservation	<u>BR34520</u>	20	Semester 2
Animal Behaviour Field Course	<u>BR34920</u>	20	Semester 1
Behaviour and Welfare of Domesticated Animals	<u>BR35120</u>	20	Semester 2
Behavioural Neurobiology	<u>BR35320</u>	20	Semester 1
Freshwater Biology Field Course	<u>BR37720</u>	20	Semester 1

## **Final Year Core modules**

#### Core (100 Credits)

Name	Module Code	Credits	Semester
Frontiers in the Biosciences	<u>BRM0200</u>	0	Semester 1
Frontiers in the Biosciences	<u>BRM0220</u>	20	Semester 2
MBiol Research Project	<u>BRM2800</u>	0	Semester 1
MBiol Research Project	<u>BRM2860</u>	60	Semester 2
Field and Laboratory Techniques	<u>BRM4800</u>	0	Semester 1
Field and Laboratory Techniques	<u>BRM4820</u>	20	Semester 2

## **Final Year**

**Options** Choose 20 credits

Name

Ecological Monitoring	<u>BRM0120</u>	20	Semester 2
Ecological Management and Conservation Biology	<u>BRM7700</u>	0	Semester 1
Ecological Management and Conservation Biology	<u>BRM7720</u>	20	Semester 2
Statistical Concepts, Methods and Tools	<u>MAM5120</u>	20	Semester 1

# **10: University Regulations**

Details of University Regulations can be found at <u>https://www.aber.ac.uk/en/academic-registry/handbook/regulations/</u>

# 11: Support for students and their learning

# **12: Entry Requirements**

Details of entry requirements for the scheme can be found at <u>https://courses.aber.ac.uk/</u>

# 13: Methods for evaluating and improving the quality and standards of teaching and learning

# 14: Regulation of Assessment

Academic Regulations are published as Part B of the Academic Quality Handbook: <u>https://www.aber.ac.uk/en/aqro/handbook/app-2/</u>

# **15: External Examiners**

External Examiners fulfil an essential part of the University's Quality Assurance. Annual reports by External Examiners are considered by Faculties and the Quality & Standards Committee at university level.

# 16: Indicators of quality and standards

The periodic Departmental Review process provides an opportunity to evaluate the effectiveness of quality assurance processes and for the University to assure itself that management of quality and standards which are the responsibility of the University as a whole are being delivered successfully.