

PROGRAMME SPECIFICATION

1	Awarding Institution	Newcastle University
2	Teaching Institution	Newcastle University
3	Final Award	BSc Hons
4	Programme Title	Marine Zoology Marine Zoology with Placement Year
5	UCAS/Programme Code	C350 1158U
6	Programme Accreditation	IMarEST
7	QAA Subject Benchmark(s)	Organismal Biology Biosciences
8	FHEQ Level	6
9	Last updated	May 2025

10 Programme Aims

We develop graduates who are equipped to solve current and future interdisciplinary biological problems using cutting edge approaches. We do this through instilling principles of critical thinking, integrated problem solving, how to collect, interpret and present scientific data and information. We teach our graduates how to solve these local, regional and global problems in an ethical and equitable manner, creating citizens who are globally aware and culturally sensitive. We equip with them with skills, knowledge and professionalism to be successful in the varied careers on offer to biosciences graduates.

11 Learning Outcomes

The programme provides opportunities for students to develop and apply competencies in the following areas. The programme competencies have references to the benchmark statements for Biosciences, Education for Sustainable Development, 4th Industrial Revolution, Education 4.0, Graduate Attributes and NU Education for Life.

On completing the programme students will be able to demonstrate the following competencies:

1. Knowledge Application

Use a systems approach to apply and integrate knowledge to find creative and future focused solutions to real-world problems.

2. Information Literacy

Identify and critically assess appropriate sources of information.

3. Practical Skills

Demonstrate a range of field, laboratory and/or computational skills relevant to your programme of study.

4. Data Literacy

Evaluate and communicate to a diverse audience the rigour, integrity and contemporary relevance of your creative solution or original research.

5. Communication

Recognise, critically question and effectively communicate scientific knowledge to a diverse audience.

6. Digital Literacy

Communicate with a diverse audience in person and through written, digital and media technologies professionally, safely and confidently.

7. Ethics Literacy

Practice effective, ethical information management and exercise responsible global and cultural citizenship through ethical behaviours.

8. Collaboration

Collaborate effectively by listening, expressing clearly, and asking constructive questions. Value diverse knowledge, perspectives, and experiences in teamwork. Be self-aware and proactively work with independence and responsibility, both individually and in groups.

9. Professional Skills & Career Management

Be self-aware and understand skillset development and be aware how this can be applied to the varied careers open to a science graduates. Be able to evaluate and make informed decisions about future personal and professional goals. Act with professionalism and resilience to make a significant contribution in the interdisciplinary workplaces of today and tomorrow.

10. Integrated Problem Solving

Apply disciplinary knowledge and skills to complex challenges, analysing and synthesising information to find solutions to address complex real-world challenges, thereby fostering critical thinking and integrated problem solving.

Teaching and Learning Methods

All competencies (1-10) are formally introduced in the Stage 1 skills module and embedded in the curriculum at all Stages of the degree programme.

There are specific modules at each Stage that give explicit opportunities for development of individual competencies. Collaboration skills (8) are developed through supervised group exercises in the laboratory and field, and via the residential field courses. Students take

part in a variety of problem solving activities (10), including design of projects, interactive exercises and planning practical work.

Students complete a wide range of authentic formative and summative assessments designed to aid learning based on their own laboratory and field work, conducted in teams or alone (5-6, 8).

All competencies are further developed at Stage 3 through more research-led modules and the project module (1-10).

For those students taking a Placement year, preparation for the placement helps to further develop professional skills and career management (9) as well as further development of these competencies (8-10) in the workplace with guidance from the Careers Service and the workplace supervisors.

Assessment Strategy

Competencies (1-10) are assessed by a combination of examination and coursework assignments, including project and practical reports, essays, oral presentations and computer-based assessments. Formative feedback is provided throughout the course to allow students to assess and develop their competencies and consolidate their learning.

12 Programme Curriculum, Structure and Features

Basic structure of the programme

- (a) Duration three years.
- (b) Comprises three stages.
- (c) A total of 360 credits, 120 Stage 1, 120 Stage 2, 120 Stage 3
- (d) Module credit values vary between 20 and 40. 20 credits represents 200 hours of student activity and 40 credits 400 hours of student activity.
- (e) Progression: Pass in 120 credits is required in Stages 1 and 2. Modules which are failed with a mark of 35 to 39 can be compensated if the overall mark is 40 or more. The Board of Examiners may pass by discretion if circumstances warrant.
- (f) Innovative features of the degree include the amount and integration of field studies into the programme, the vocational work placement, the overseas field course and the use of external practitioners and case studies to inform Stage 3 teaching. Students undertake two weeks of residential field courses, one week of local field work and practical laboratory, field and research vessel classes.

The following principles have been followed within this degree programme with respect to its overall structure:

- **Stage 1** modules are broad in scope and complementary in subject area. They are designed so that all Stage 1 students receive the same solid grounding in all fundamental areas underpinning biology, regardless of entry qualifications. Study and reading patterns are quite strongly directed.
- **Stage 2** modules are more specialised, relating more closely to the specifics of the subject. In general, study is more self-driven than at Stage 1, and students are encouraged to develop a more individual and original approach to reading and report writing. Some modules are based around specific practical techniques, so that at the end of Stage 2, students should be competent to carry out selected species identifications, and biochemical, physiological and ecological analyses. Students will also have had some experience of critically reviewing research literature, experimental design and data analysis, and the presentation of written and spoken reports resulting from their own work.
- **Stage 3** modules are yet more specialised and research led. Much time is taken up with individual research work in the laboratory, library or field. Students are expected to apply the techniques and knowledge that have been learnt in earlier Stages to specific tasks. Work should be highly self-directed and revolve around the study of recent research-based literature. High quality work at this level should combine all the competencies listed in the preceding sections.

Students on the Careers Placement Year programme will take their placements in the penultimate year of studies. (Students on the Inversion course will take their placement after their final year of studies).
Key features of the programme (including what makes the programme distinctive)
<p>This programme integrates key aspects of the study of Marine Zoology, by providing students with the opportunity to study organismal biology, natural history and physiology. It is distinctive from 'classical' marine biology programmes in that it explicitly provides tailored learning in the fields of organism form and function, taxonomy and molecular biology with less emphasis on applied fields of conservation, management, anthropogenic impact and broad-scale ecology.</p> <p>Students will have gained vocational employability skills that are embedded within their programme and there is a strong emphasis on developing practical skills in the laboratory, field and on-board the research vessel. Students are encouraged from the first Stage of their degree programme to become independent learners and develop key transferable competencies.</p>
Programme regulations (link to on-line version)
C350_1158U: -RC350_1158U

13 Support for Student Learning
<p>Generic information regarding University provision is available at the following link.</p> <p>Generic Information</p>

14 Methods for evaluating and improving the quality and standards of teaching and learning
<p>Generic information regarding University provision is available at the following link.</p> <p>Generic Information</p> <p><i>Accreditation reports</i> Institute of Marine Engineering, Science & Technology (IMarEST)</p> <p><i>Additional mechanisms</i></p>

15 Regulation of assessment
<p>Generic information regarding University provision is available at the following link.</p> <p>Generic Information</p>

In addition, information relating to the programme is provided in:
<p>The University Prospectus: http://www.ncl.ac.uk/undergraduate/degrees/#subject Degree Programme and University Regulations: http://www.ncl.ac.uk/regulations/docs/</p>

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.
