

Biology (Ecology and Conservation)

BSc Honours

- UCAS code: **C182**
- Full time
- 3 years
- Next start date: **September 2020**

This three-year BSc Honours degree covers plants, animals and micro-organisms, but with a strong focus on whole organisms and their roles in the environment.

Fees (per year)

- Home: **£9250**
- International: **£22800**

Entry requirements

- A Level: **AAB-BBB**
- IB: **32-34 points**

UCAS Institution name and code:

- NEWC / N21

Course overview

In the first year, all students study core biology modules, giving you a strong foundation in the subject. In later stages, you will study specialist topics related to ecology and the environment, such as:

- UK wildlife
- population genetics
- plant biology
- pollution science
- vertebrate biology
- biodiversity, ecology and conservation

Lab and field-based teaching equips you with scientific skills required by professional biologists. You will enjoy a species identification field course, as well as a week-long project-based residential field course.

BSc or MBiol?

Some of our degrees are offered at two levels:

- three-year Bachelor of Science (BSc)
- four-year Master of Biology (MBiol)

Our MBiol degrees involve an additional year of advanced study at master's level, during which you will gain significant research experience to increase your employability.

COVID-19

Please rest assured we make all reasonable efforts to provide you with the courses, services and facilities described. However, it may be necessary to make changes due to significant disruption, for example in response to COVID-19.

[See our terms and conditions for more information](#)

[View our Frequently Asked Questions](#)

Your course during COVID-19

Whilst things will not be the same when you join us in September, this course page is intended to give you insight into what to expect from your course and your learning experience for the duration of your degree.

We have updated all course information where there are specific changes in the first semester.

Facilities

Most of our student services are now available online. As COVID-19 restrictions lift, we'll be opening up our on-campus facilities as soon as it is safe to do so, so that you can get the best out of your studies.

Your learning experience

Your teaching will be a mixture of online and in-person on-campus teaching. In semester one, as a result of physical distancing requirements, all lecture materials will be delivered online along with many tutorials, workshops and labs.

Our aim, if Government guidance allows us, is to deliver up to three hours of labs, seminars and tutorial teaching in-person on campus where this is possible and safe to do so. We'll review this regularly and plan to return to full in-person, on-campus teaching in semester two if restrictions allow.

Assessment

In semester one, we will not be running face-to-face, on-campus examinations. We will instead use different approaches to assessment. These will test and support your learning.

Field trips

We will be running some but not all of our planned field trips. Some of those that do run, will be run virtually. For those that do not run, we will be offering alternative learning activities. These learning activities will give you the opportunity to achieve the same learning.

Terms and conditions and student complaints

The University has [terms and conditions](#) which create a positive environment for learning and academic achievement.

Further information

Our [COVID-19 Study page](#) gives more information about your Newcastle University 2020 study experience.

Given the changing nature of the COVID-19 pandemic, the commitments outlined are subject to the guidelines that may be in place at the time.

Quality and ranking

Biology at Newcastle ranks in the top 150 in the world in the Life Sciences category, Times Higher Education World University Rankings by Subject 2020.

Modules and learning

Modules

The information below is intended to provide an example of what you will study.

Most degrees are divided into stages. Each stage lasts for one academic year, and you'll complete modules totalling 120 credits by the end of each stage.

Our teaching is informed by research. Course content may change periodically to reflect developments in the discipline, the requirements of external bodies

and partners, and student feedback.

Optional module availability

Student demand for optional modules may affect availability.

Full details of the modules on offer will be published through the [Programme Regulations and Specifications](#) ahead of each academic year.

This usually happens in May.

To find out more please [see our terms and conditions](#).

The first year of this degree is shared with other degrees in the School. This provides all students with a thorough knowledge of the fundamentals of biology.

You can transfer to one of our other Biology degrees before the second year should your interests change (subject to achieving the appropriate grades).

Modules

Compulsory Modules	Credits
Genetics and Evolution	20
Diversity of Life: Form and Function	20
Ecology and Conservation	20
Cells and Biomolecules	20
Academic and Professional Skills for the Biosciences	20
Optional Modules	Credits
Crop Pests	10
Principles of animal physiology and health	20
Natural Science Research Impact	10
Sedimentology and Stratigraphy	10

Introduction to Scientific Computing for Chemists	10
The Marine Environment	20
Marine Microbiology and Primary Producers	20

In Stage 2, you'll start to focus in on your ecology and conservation specialism, with modules including pollution of air, water, and soil, UK wildlife, vertebrate biology, plant biology, and environmental management skills.

Modules

Compulsory Modules	Credits
Site Management and Communication Skills	20
Field Identification Skills	10
Pollution of Air, Water & Soil	10
Experimental Design and Statistics	10
Biodiversity, Ecology and Conservation	20
Residential Field Course	10
Optional Modules	Credits
Sustainable Solutions	10
Animal Behaviour	10
UK Wildlife	10
Vertebrate Biology	20
Plant Biology	20
Molecular Evolution and Systematics	20
Insect and arthropod biology	20
Ecology of Marine Systems	20
Career Development for second year students	20

Developing Enterprise,
Entrepreneurship and Employability 20

In Stage 3 you'll complete either a week long mammal surveying project on the university's farm, or a 12 day trip to Tanzania or South Africa, where you'll study ecology, conservation, and management challenges in tropical landscapes.

You'll also complete a biological literature review, a biological research project, or a biological information project.

Modules

Compulsory Modules	Credits
Mammal Surveying Skills	10
Biodiversity Science and Management	20
Applied Ecology	20
Optional Modules	Credits
Environmental Impact Assessment	20
Sustainable Development and Environmental Valuation	10
Zoo Animal Science and Management	10
Molecular Evolution and Systematics	20
Biological Modelling	20
Physiological Zoology	20
Global challenges in plant science research	20
Biological Literature Review	40
Biological Information Project	40
Biological Research Project	40

Teaching and assessment

Teaching methods

You'll learn from a combination of teaching methods, including:

- lectures
- seminars
- field work
- lab work

Assessment methods

You'll be assessed through a combination of:

- Assessments
- Assignments – written or fieldwork
- Case studies
- Coursework
- Dissertation or research project
- Essays
- Examinations – practical or online
- Group work
- Practical sessions
- Presentations
- Projects

Skills and experience

Research skills

Throughout your studies, you'll develop key research skills, conduct your own

research, and also learn from the research of your lecturers.

During your second year, you'll complete an experimental design and statistics for biologists module, allowing you to develop the problem-solving and statistical skills required by research biologists.

In your final year, you'll have the option to complete an independent biological research project.

Practical skills

This is a practical course and you'll spend time in labs and off campus on field trips. You'll develop practical skills by observing and experimenting in the lab and the field, using scientific apparatus.

Opportunities

Study abroad

Experience life in another country by choosing to study abroad as part of your degree. You'll be encouraged to embrace fun and challenging experiences, make connections with new communities and graduate as a globally aware professional, ready for your future.

You can choose to spend up to a year studying at a partner institution overseas.

If you choose to study abroad, it will extend your degree by a year.

[Find out more about study abroad](#)

Work placement

Get career ready with a work placement and leave as a confident professional in your field. You can apply to spend 9 to 12 months working in any organisation in the world, and receive University support from our dedicated team to secure your dream placement. Work placements take place between stages 2 and 3.

You'll gain first-hand experience of working in the sector, putting your learning into practice and developing your professional expertise.

If you choose to take a work placement, it will extend your degree by a year. Placements are subject to availability.

[Find out more about work placements](#)

Facilities and environment

Facilities

As a Biology and Zoology student, you'll be based in [the School of Natural and Environmental Sciences](#) at our city-centre campus.

During your studies, you'll have access to two commercial farms near Newcastle. These are used as demonstration facilities as well as a field station with glasshouse and dedicated teaching facilities.

You'll have the opportunity to access purpose-built laboratories. You can also visit the Great North Museum, where there's a range of important biological collections. We also have our controlled-environment aquaria situated in the Ridley 2 Building.

Support

As a new student, you'll receive a tablet, so you can download online learning resources, helping to make our campus more sustainable.

You'll have the support of an academic member of staff as a personal tutor throughout your degree to help with academic and personal issues.

Your future

Graduates specialising in Ecology and Conservation are equipped for exciting careers within organisations including the Wildlife Trust, Nature Trek, WWT, Natural England, National Trust, RSPB.

You'll have opportunities in areas such as environmental management, teaching, environmental education, and science education. You could even become a wildlife filmmaker – one of our graduates was the producer on Blue Planet II.

With a host of highly transferable skills, you'll also be able to pursue careers in sectors as diverse as banking and retail management, media, and adventure tourism.

Many of our graduates also go on to further study and research.

Industry links

Our strong industry links will allow you to benefit from placement, volunteering and networking opportunities, as well as

We have links with many of the leading organisations in the field, including:

- National Trust
- WWT
- Natural England
- Local Eco consultancies
- National Parks Authority
- Great North Museum

Enterprising students

Careers support

Our Enterprise Challenge gives students the opportunity to work with industry on a project that tackles real-world issues. Watch the above video to find out more.

Our award-winning Careers Service is one of the largest and best in the country, and we have strong links with employers. We provide an extensive range of opportunities to all students through our ncl+ initiative.

[Visit our Careers Service website](#)

Find out more...

- Go online for information about our full range of degrees:
www.ncl.ac.uk/undergraduate
- To watch videos about student life in Newcastle, visit
www.ncl.ac.uk/lovenewcastle
- Visit **www.ncl.ac.uk/tour** to take virtual tours of the campus and city
- Book for an Open Day to come and see us in person
www.ncl.ac.uk/openday
- Contact us online at **www.ncl.ac.uk/enquiries** or phone +44 (0)191 208 3333

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www.ncl.ac.uk/pre-arrival/regulations

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