

Course Summary: October 4, 2022

## Biology

BSc Honours

- UCAS code: **C100**
- Full time
- 3 years
- Next start date: **September 2022**

Our newly developed, flexible, Biology BSc Honours degree gives you the freedom to study a broad spectrum of the natural world around us.

### Fees (per year)

- Home: **£9250**
- International: **£25200**

### Entry requirements and offers

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

[View contextual offers](#)

UCAS Institution name and code:

- NEWC / N21

## Course overview

With a host of interesting environments on your doorstep, and access to world-leading research, this Biology degree will equip you with a wide-ranging knowledge of the subject.

You'll develop a comprehensive understanding of all forms of life, from cells and molecules to organisms and ecosystems.

You'll have the opportunity to put your skills into action through:

- lab-based classes
- day excursions
- residential field courses

### 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.

### **Your course and study experience - disclaimers and terms and conditions**

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

View our [Academic experience page](#), which gives information about your Newcastle University study experience for the academic year 2022-23.

See our [terms and conditions and student complaints information](#), which gives details of circumstances that may lead to changes to programmes, modules or University services.

## Quality and ranking

- Top 125 for Life Sciences - Times Higher Education World University Rankings by Subject 2022
- Top 120 for Biological Sciences - QS World University Rankings by Subject 2022
- 1st in the UK and 8th in the world for sustainable development – Times Higher Education Impact Rankings 2022
- 65% increase in research power since 2014 – Research Excellence Framework 2021
- 42% of our research is classified as 4\* world-leading research – Research Excellence Framework 2021
- Global Top 125 University - QS World University Rankings 2023

## 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.

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### **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 Biology-related degrees in the School. You can transfer to one of our other Biology and Zoology degrees before the second year should your interests change (subject to achieving the appropriate grades).

You'll develop a strong foundation in the subject and get stuck into practical work straight away. Modules include: Diversity of Life, Genetics and Evolution, Cells and Biomolecules, Ecology and Conservation and Study Skills.

### Modules

Compulsory Modules	Credits
<a href="#">Genetics and Evolution</a>	20
<a href="#">Diversity of Life: Form and Function</a>	20
<a href="#">Ecology and Conservation</a>	20
<a href="#">Cells and Biomolecules</a>	20
<a href="#">Academic and Professional Skills for the Biosciences</a>	20
Optional Modules	Credits
<a href="#">Crop Pests</a>	10
<a href="#">Animal Health</a>	10
<a href="#">Introduction to Animal Physiology</a>	10
<a href="#">Natural Science Research Impact</a>	10

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

In Stage 2, you'll continue to build upon your skills, delving deeper into the field. Modules include Field Identification Skills, Animal Function, Plant Biology, Microbiology, Biodiversity, Ecology and Conservation and Biotechnology. You'll also have the option to embark on a residential field course or an intensive practical lab course.

## Modules

Compulsory Modules	Credits
Experimental Design and Statistics	10
Optional Modules	Credits
Animal Parasitology	10
Site Management and Communication Skills	20
Sustainable Solutions	10
Field Identification Skills	10
Animal Behaviour	10
Pollution of Air, Water & Soil	10
Microbial Biochemistry	20
Biodiversity, Ecology and Conservation	20
Biotechnology: Principles and Practice	20
Animal Function (Physiology and Development)	20
Plant Biology	20

Molecular Evolution and Systematics	20
Insect Biology and Origins	20
Field-based Ecology: designing experiments, and residential field course	20
Vertebrate Biology	10
Geomicrobiology	10
Ecology of Marine Systems	20
Applied Marine Biology	20
Career Development for second year students	20
Biological Psychology: Sex, Drugs, Rhythms and Blues	10

You'll work independently on an extensive project with a choice between a Biological Literature Review, a Biological Research Project and a Biological Information Project.

You will have a choice of specialist topics such as: molecular biology, genomics and biotechnology; biological computer modelling; biodiversity and conservation.

Many of these are linked to our research expertise.

## Modules

Compulsory Modules	Credits
Global challenges in plant science research	20
Biological Project Dissertation	40
Optional Modules	Credits
Mammal Surveying Skills	10

Biodiversity Science and Management	20
Current Research in Ecology	20
Biotechnology: Applications	20
Biological Modelling	20
Physiological Zoology	20
Microbial Genomics	20
Current Research in Plant and Microbial Biology	20
Advanced Marine Research Topics I	20
Creativity, Innovation and Market Research in Science and Engineering	10
UG	

### Module Overview - BIO3039: Biodiversity Science and Management

During Stage 3, you can study this optional module in biodiversity and biodiversity management. You'll investigate aspects that are impacting the Earth; including climate change, tropical deforestation and invasive species. You'll be equipped with the skills to understand conservation management.

### Information about these graphs

We base these figures and graphs on the most up-to-date information available to us. They combine data on the planned delivery and assessments of our courses in 2021-22 with data on the modules chosen by our students in 2020-21.

Teaching time is made up of:

- scheduled learning and teaching activities. These are timetabled activities with a member of staff present
- structured guided learning. These are activities developed by staff to support engagement with module learning. Students or groups of students undertake these activities without direct staff participation or supervision

## Teaching and assessment

### Teaching methods

You'll be taught via a combination of methods, including lectures and interactive online classes.

Our field and lab-based modules provide you with an exceptional basis to build practical experiences. These enhance the scientific skills expected of a biology graduate.

### Assessment methods

You'll be assessed through a combination of:

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



- Presentations
- Projects
- Reports
- Seminar tasks/exercises

## Skills and experience

### Research skills

Your learning will be strongly informed by the School's research. You'll be taught by experts at the forefront of their respective fields in:

- microbial biotechnology
- plant biology
- animal physiology and behaviour
- biodiversity and conservation
- biological computer modelling

### Hands-on experience

This is a highly practical course. You'll spend time in the lab or off campus on field trips.

Field trip destinations include:

- the Northumbrian countryside
- our marine field station
- our University farm

Lab-based modules introduce you to key research techniques. Modules include:

- bioprospecting
- cellular biochemistry
- molecular evolution and systematics

Several modules are focused on fieldwork, such as Field Identification Skills and

Mammal Surveying Skills.

## Business skills

You'll have the opportunity to complete a work placement between stages 2 and 3, as well as taking part in University-wide expeditions on an extra-curricular basis.

You will also have the chance to take part in the International Genetically Engineered Machine Competition, or iGEM for short. iGEM is a multidisciplinary, student-led research competition that aims to use Synthetic Biology to help solve global issues. iGEM teams work inside and outside the lab. They create sophisticated projects that strive to solve real-world problems with a global impact.

iGEM is a challenging experience. It provides a unique hands-on experience of the synthetic biology process. We have had many successful years with our students attending this worldwide jamobree.

## 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. Your degree title will show you have achieved the placement 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

To support you in your studies, all new students entering year 1 or year 2 will receive a tablet. You can download the online learning resources you'll need for your course (helping us 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

Recent graduates have taken roles such as:

- researcher
- environmental monitoring officer
- science explainer at Newcastle's Centre for Life
- science writer, within organisations such as RSPB, WWT, and Natural England

Many students also go on to further education, pursuing master's degrees, PhDs, postgraduate teaching qualifications, and medicine and law courses.

Having developed a broad range of transferable skills, you'll also have career prospects in industries as diverse as banking and retail management, media production, and adventure tourism.

## Industry links

The faculty has built strong links with leading organisations, including:

- National Trust
- Natural History Society of Northumbria
- WWT
- National Parks Authority
- GENEIUS

These links will provide opportunities to secure work placements, internships, and volunteer roles, as well as building up an invaluable network of contacts in

the sector.

## 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](#)

## Recognition of professional qualifications outside of the UK

From 1 January 2021 there is an update to the way professional qualifications are recognised by countries outside of the UK

[Check the government's website for more information.](#)

## Find out more...

- Go online for information about our full range of degrees:  
**[www.ncl.ac.uk/undergraduate](http://www.ncl.ac.uk/undergraduate)**
- To watch videos about student life in Newcastle, visit  
**[www.ncl.ac.uk/lovenewcastle](http://www.ncl.ac.uk/lovenewcastle)**
- Visit **[www.ncl.ac.uk/tour](http://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](http://www.ncl.ac.uk/openday)**
- Contact us online at **[www.ncl.ac.uk/enquiries](http://www.ncl.ac.uk/enquiries)** or phone +44 (0)191 208 3333

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**[www.ncl.ac.uk/pre-arrival/regulations](http://www.ncl.ac.uk/pre-arrival/regulations)**

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