

AS and A-level Biology

Biology A-level will give you the skills to make connections and associations with all living things around you. Biology literally means the study of life and if that's not important, what is? Being such a broad topic, you're bound to find a specific area of interest, plus it opens the door to a fantastic range of interesting careers.

Possible degree options

According to **bestcourse4me.com**, the top seven degree courses taken by students who have an A-level in Biology are:

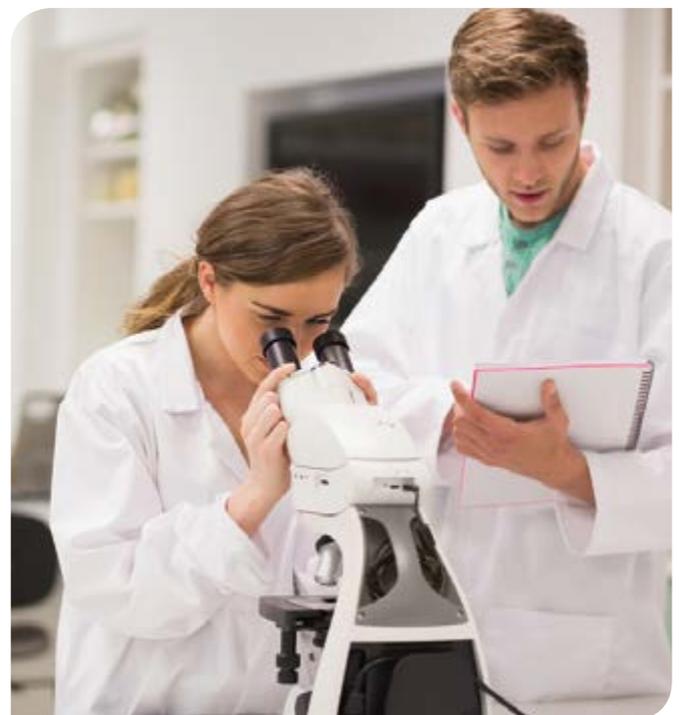
- Biology
- Psychology
- Sport and exercise science
- Medicine
- Anatomy
- Physiology and Pathology Pharmacology
- Toxicology and Pharmacy Chemistry.

Find out more
aqa.org.uk/science

Possible career options

Studying A-level Biology at university gives you all sorts of exciting career options, including:

- Doctor
- Clinical molecular geneticist
- Nature conservation officer
- Pharmacologist
- Research scientist
- Vet
- Secondary school teacher
- Marine biologist
- Dentist.



Topics covered

AS Biology is one year long, with exams at the end.

A-level Biology lasts two years, with exams at the end of the second year. The table below shows the topics you will study in each year.

AS and first year of A-level	Second year of A-level
1. Biological molecules	5. Energy transfers in and between organisms
2. Cells	6. Organisms respond to changes in their internal and external environments
3. Organisms exchange substances with their environment	7. Genetics, populations, evolution and ecosystems
4. Genetic information, variation and relationships between organisms	8. The control of gene expression

Practicals

Biology, like all sciences, is a practical subject. Throughout the course you will carry out practical activities including:

- using microscopes to see cell division
- dissection of animal or plant systems
- aseptic technique to study microbial growth
- investigating activity within cells
- investigating animal behaviors
- investigating distributions of species in the environment.

These practicals will give you the skills and confidence needed to investigate the way living things behave and work. It will also ensure that if you choose to study a Biology-based subject at university, you'll have the practical skills needed to carry out successful experiments in your degree.

Exams

There is no coursework on this course. However, your performance during practicals will be assessed.

There are three exams at the end of the two years for A-level, all of which are two hours long. At least 15% of the marks for A-level Biology are based on what you learned in your practicals.

The AS has two exams at the end of the year. Both are 1 hour 30 minutes long.

Entry requirements

Every school and college sets its own entry requirements. A-level Biology builds on the work done in GCSE Science and Maths, so you'll need good GCSE results from both. Written communication is also important and you'll need to be a strong writer. If you're interested in studying Biology after your GCSEs, ask your teacher about the qualifications you'll need.

“Biology is bigger than physics. It enjoys bigger budgets, a bigger workforce, and achieves more major discoveries. Biology is likely to remain the biggest part of science through the twenty-first century.”

Freeman Dyson, theoretical physicist and mathematician