

# A Level Biology

**Biology literally means 'the study of life'. A Level Biology is a dynamic subject, taught in a lively, enjoyable and varied way. Our motto is "Variety is the Spice of Life Science!"**

## Practical work

Biology, like all sciences, is a practical subject. Throughout the course you will carry out a range of practical investigations that will give you the skills and confidence to draw conclusions and evaluate the way living things work and behave.

Examples:

- Using microscopes to see cell division
- Heart dissection
- Microbiology: effects of antibiotics on bacteria
- Studying animal behaviour
- Factors affecting enzyme activity
- Chromatography of photosynthetic pigments
- Urine analysis & diabetes



Every year students opt to take part in the British Biology Olympiad- with great success! The BBO challenges and stimulates students to expand and extend their talents.

Year 1 (AS)	Year 2 (A2)
<ul style="list-style-type: none"> <li>• Biological molecules, DNA &amp; enzymes</li> <li>• Cell structure &amp; cell division</li> <li>• Immune system</li> <li>• Gas exchange in plants &amp; animals</li> <li>• Transport: heart &amp; circulation</li> <li>• Biodiversity &amp; classification</li> </ul>	<ul style="list-style-type: none"> <li>• Photosynthesis &amp; Respiration</li> <li>• Homeostasis &amp; hormones</li> <li>• Receptors, nerves &amp; muscles</li> <li>• Inheritance &amp; genetics</li> <li>• Evolution &amp; populations</li> <li>• Ecosystems &amp; energy flow</li> <li>• Gene technology, medical diagnosis &amp; gene expression</li> </ul>



### Entry Requirements:

This A Level builds on prior knowledge from GCSE in science and maths, so it is important that you have good results from both.

You need to have achieved:

Five GCSEs at grade 5 to 6 or above, including Maths and English Language. GCSE Science grade 66 (combined science) or GCSE Biology grade 6 (separate).

### Assessment:

**AS:** 100% by examination. You will sit two 1.5-hour exams at the end of Year 1 and must achieve grade D or above to continue into Year 2.

**A2:** 100% by examination. You will sit three 2-hour exams at the end of Year 2. There is no coursework, but you must complete twelve assessed practicals to achieve a Practical Endorsement Certificate. 15% of your exam marks tests practical knowledge. 10% of your exam marks tests Maths skills.

### Courses at University include:

- Dentistry
- Biochemistry
- Biomedical Sciences
- Environmental Science Biology
- Medicine
- Radiography
- Sport & Exercise Science
- Physiotherapy
- Zoology

### Careers include:

- Conservationist
- Dentist
- Doctor
- Marine Biologist
- Nurse
- Paramedic
- Pharmacologist
- Research Scientist
- Teacher
- Vet

