



How will I be assessed?

There are three summer examinations each contributing a third of the A level. These exams will be taken at the end of the second year.

'Biology Futures' Programme

Workshops deliver enrichment activities designed to stretch and challenge students. Students have the opportunity to enter the British Biology Olympiad, and in previous years we have had several medalists. In summer 2012, one of our gold medallists was selected to represent Great Britain at the finals in Singapore, winning a silver medal and in 2013 a student travelled to Switzerland, also winning a silver medal. In recent years a number of our students have achieved gold medals in the UK competition. Recently two of our students made it through to the second round and one to the selection round at Warwick University, narrowly missing the opportunity to represent the UK at the international competition.

What extra work can I do?

Wide reading is essential and is encouraged, as is the use of a wide range of other media (television, radio, and internet) to broaden and enrich student's knowledge. Students are supported in accessing appropriate periodicals and journal articles, and relevant lectures and courses that students can attend are advertised.



Biology A Level AQA



What sort of work will I be doing?

Teaching and learning takes advantage of a wide range of approaches including class discussions, practical work, group work and independent guided study. Considerable use is made of Godalming 'on-line' resources both during teaching and for individual study. On-line resources include a full set of topic notes, video clips, past paper questions and answers, quizzes, help forums, as well as teachers' powerpoint presentations. Practical work forms a very important part of the course and students undertake a number of investigative experiments, as well as microscope work.

What are the entry requirements?

A minimum of five GCSE subjects at Grade 4 or above plus two grade 6s in Science (if separate sciences taken a grade 6 in Biology and Chemistry) plus Maths at grade 6 or above.

What is the course about?

The Department offers the AQA Biology specification.

For A level Biology students study the core concepts of Biology which includes; The structure and function of Biological molecules, Cell structure and replication, how organisms exchange substances with their environment (including gas exchange, transport and nutrition) and genetic information, variation and relationships between organisms. Students also study 4 further components which are separated into Energy Transfers in and between organisms (photosynthesis and respiration), Organisms response to the internal and external environment (the nervous system and homeostasis), Genetics, populations, evolution and ecosystems, and The control of gene expression including genetic engineering.

12 compulsory practicals are completed towards the practical endorsement. Other practical work will be carried out where appropriate to support biological theory.



What is the department like?

The Biology Department is housed in 4 well-equipped and newly refurbished laboratories and is resourced with a wide range of modern apparatus, texts and reference resources. Specialist teachers within the department present material in an engaging and enjoyable way. Revision sessions are also provided, and students are encouraged to book 1-2-1 appointments with their teachers for help either when experiencing difficulties or to extend their knowledge. All Biology courses follow carefully structured schemes of work.

Would you like to know?

Do saturated fats cause heart disease? Why do some cells become cancerous? How closely related are we to chimpanzees? Why do fish die out of water? How do pacemakers work? Why can cows exist on a diet of grass and we can't? Why are some people lactose intolerant?

That's just the first year! In year two; Why are antibiotics ineffective against flu? How do painkillers work? What does DNA actually do? How can infertility arise? Is cloning acceptable? Can gene therapy cure diseases? How does the kidney work?

WHAT ARE THE PROGRESSION ROUTES FOR THIS QUALIFICATION?

Biological science is one of the broadest and most important subjects in the world today. Put simply, biology is the study of life. Biology encompasses everything from the molecular study of life processes right up to the study of animal and plant communities. A level Biology is a great choice for people who want a career in health and clinical professions, including medicine, dentistry, veterinary science, physiotherapy, nursing and forensic science. It is also necessary for a degree in any of the Biological sciences which range from neuroscience, genetics, biomedical science, biochemistry, zoology, conservation and marine biology. The skills developed in a Biology A level are also valued in careers within the pharmaceutical industry, biological economics, science publishing, government policy, education and biotechnology.