

BIOLOGY Advanced Level

Qualification Level 3 Advanced GCE in Biology

Exam Board AQA

Course Specific Entry Requirements Grades 6-6 or above in GCSE Combined Science **or** Grade 6 or above in GCSE Biology **and** Grade 6 or above in GCSE Chemistry **or** GCSE Physics. Grade 6 or above in GCSE Mathematics is also required

Overview

- ▲ How can two metres of DNA be crammed into a nucleus with a diameter of one hundredth of a millimetre?
- ▲ What does the inside of an eyeball look like?
- ▲ How does the heart pump blood in a perfect one-way system?

These are just some of the many fascinating questions which form part of the study of Biology – life and living processes – and which make this subject one of the most popular at The Spires College.

Advanced Level Biology is a challenging, rewarding course that will help you to develop the knowledge and skills required for Higher Education and for a successful career.

What will I learn?

In the **first year** of the course you will study:

- ▲ Biological molecules
- ▲ Cells
- ▲ How organisms exchange substances with their environment
- ▲ Genetic information, variation and relationships between organisms

In the **second year**, you will learn about:

- ▲ Energy transfers in and between organisms
- ▲ How organisms respond to changes in their internal and external environments
- ▲ Genetics, populations, evolution and ecosystems
- ▲ The control of gene expression

The eight topics are assessed via three written examinations at the end of the course. Each examination lasts two hours. Papers 1 and 2 consist of both short and long answer questions as well as comprehension questions. Paper 3 comprises structured questions, critical analysis and an essay question.

Practical Skills Endorsement

This qualification will give you opportunities to use relevant apparatus and techniques to develop and demonstrate specific practical skills. To achieve a pass, you must demonstrate that you are competent in all of the practical skills listed in the subject content requirements. You will demonstrate your practical competency by completing a series of core practicals throughout the course. This does not form part of your overall A Level grade.

How will I learn?

Your lessons will take many forms and will involve a range of interactive teaching and learning strategies. There may be lectures, seminars, discussion groups or practical work. You will be expected to read journals, engage in debate and to take an active part in their own learning.

Where could it lead?

Biology offers a wide range of career and Higher Education opportunities. It is a broad science which allows you to study a range of topics which are traditional yet relevant to today's research. Biology is going through a period of great expansion and interest. It offers great opportunities and is well placed to become the science of the new millennium.