

Structure & Specification

Year 1: AS H021

Year 2: A2 H421

What does the course include?

Year One- AS

Unit One: *Cells, Exchange and Transport.* In this unit you will learn about the structure of cells and how they work, including cell division and diversity. You will also cover transport and exchange systems in mammals and plants.

Unit Two: *Molecules, Biodiversity Food and Health.* In this unit you will learn about the structure and function of biomolecules like protein and DNA. You will explore the diversity and origin of life on earth. The unit also covers how diet and smoking affect health, and how the immune system can protect the body against disease. You will carry out some fieldwork as part of this unit.

Unit Three: *Practical Skills in Biology 1.*

You will be assessed on your practical and investigative skills which you will have developed during AS Biology. The three tasks (qualitative, quantitative and evaluative) will be completed in lesson time under controlled conditions.

All AS students must attend a residential ecology field course at the beginning of the summer term.

Year Two- A2

Unit Four: *Communication, Homeostasis and Energy.* In this unit you will learn about the way in which energy is used in organisms, including details of photosynthesis and respiration and control and co-ordination in animals and plants.

Unit Five: *Control, Genomes and Environmental Biology.* In this unit you will study genetic control of cells and variation in animal and plants. You will explore various gene technologies like cloning and gene therapy. The unit covers the nervous control and animal behaviour. There is also a section on environmental biology.

Unit Six: *Practical Skills in Biology 2.*

This unit is similar to *Practical Skills in Biology 1* in its format of three classroom based practical activities. However the tasks will require a higher level of understanding and explanation.

How will I learn?

The course will be taught by two teachers and you will learn by a wide variety of activities such as: individual work using textbooks or the Internet, group discussions, experiments, fieldwork, watching DVDs, using CD-roms, giving presentations. You will be expected to do a considerable amount of independent study and you may

How will my work be assessed?

AS:

Unit One by written examination in January; Unit Two by written examination in June and Unit Three will be assessed internally during the first two terms.

A2:

Unit Four by written examination in January; Unit Five by written examination in June and Unit Six will be assessed internally during the first two terms of the second year.

What skills will I need to be successful in this subject?

You must have a genuine interest in Biology, and enjoy practical work. You must be willing to ask questions, participate in all kinds of learning activities and you need to be prepared to work hard and put a great deal of effort into developing your understanding of this key science.

What are the entry requirements?

You need a good GCSE profile, normally including grade C or above in English Language and Maths, and B for Double Science (or Biology).

What are the opportunities after this course for further/higher education and employment?

A level Biology is needed for many higher education courses in medical and life sciences. The skills learnt in all science A levels are highly regarded by universities and employers, for example in the financial world.