

# Biology AS/A2

## EXAMINATION BOARD

OCR - Biology Modular - 9534

## ENTRANCE REQUIREMENTS

GCSE Science Grade 'CC'

## THE COURSE

Biology at Advanced Subsidiary and Advanced GCE level will enable you to develop an appreciation of its significance. It is a subject that can provide you with great enjoyment and respect for all things living. This course develops many of the topics you may have already studied and introduces you to some of the exciting areas of Biology in the contemporary world. You may study, for example, the influence that genes have on our development, environmental issues and aspects of human health. Biology is a practical science subject so you will develop experimental skills and an understanding of the scientific method. It is hoped that this course will help you gain some understanding of the dynamic and exciting nature of biology today, and an awareness of the ethical, technological and economic aspects of the subject. Assessment of the AS and A2 Biology course is by examination and coursework.

## COURSE CONTENT

Before taking the AS units of assessment you will study the following modules of work:

### Module 2801 Biology Foundation

In this module you will learn about the structure of cells and how they work, including cell division, how enzymes work and how genes control the cell. Also included is a section on ecosystems and ecology.

### Module 2802 Human Health and Disease

In this module you will learn about the way in which diseases, diet and smoking affect health, and how the immune system can protect the body against disease. Also included is a study of the effects of exercise.

### Module 2803/1 Transport

In this module, which is shorter in length than 2801 and 2802, you will learn about transport systems in mammals and plants and develop further topics such as the transport of oxygen, which were covered at GCSE.

Practical work is assessed by means of coursework. Coursework may consist of several different pieces of work or one whole investigation covering the four aspects of planning, implementing, analysing and evaluation also assessed at GCSE.

**Before taking the A2 units of assessment you will study:-**

### Module 2804 Central Concepts

In this module you will learn about the way in which energy is used in organisms, including details of photosynthesis and respiration, population ecology, genetics and evolution, and control and co-ordination in animals and plants. This includes a residential Field Trip in the First Term of Year 13.

You will then study one further option module, which, in our case, will be **MICROBIOLOGY & BIOTECHNOLOGY**.

**Practical Work for A2 is Assessed in the same way as AS**

### Synoptic Paper

You will also take a paper (2806/1) that will test your knowledge and understanding of the topics in the AS modules and in module 2804 (Central Concepts). It will also test your skills in such things as data analysis that you have developed throughout the course.