

# Science

## Applied Single AS/A Level OCR

### Structure & Specification

Year 1- AS GCE Single award – H175

Year 2- A2 GCE Single award – H575

### What does the course include?

#### Year One – AS

**Module 1:** *Science at Work*. In this module you will learn about how science is used in the real world. You will study organisations that use science to make things (e.g. food processing factories) and service providers who use science (e.g. hospitals).

**Module 2:** *Analysis at Work*. This module explores how scientists analyse samples from the environment, from living organisms, or from production processes in industry. It involves a lot of practical chemistry. You will also study electricity production and look at energy efficiency in industry.

**Module 3:** *Monitoring the Activity of the Human Body*. This module includes the study of human biology, medical science, health and fitness.

#### Year Two – A2

**Module 4:** *Investigating the Scientist's Work*. In this module you will research and carry out an individual practical project related to a vocational content.

**Module 5:** *Ecology and Managing the Environment*. This module is based on a River Pollution Study completed as part of a field trip at the end of year one and a visit to the London Wetland Centre.

**Module 6:** *Working Waves*. Here you will learn about the practical application of electromagnetic waves (light, radio, X-rays, microwaves) in areas such as medical imaging and mobile phone technology.

### How will I learn?

You will have different teachers for each module and you will learn by a wide variety of activities such as individual work using textbooks, group discussions, lots of experiments, making models, watching videos, using CD roms and the internet, giving presentations. Visits to scientific organisations are essential parts of the course and the majority are compulsory. You will have plenty of opportunities to develop

### How will my work be assessed?

**AS & A2:** For AS the two coursework modules are submitted in May followed by one written examination in June. For A2 one module of coursework will be submitted in January and the other in May, and there is also one written examination.

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

This is a challenging level 3 course, and you must have a keen interest in the applications of science. You must be enthusiastic and willing to participate in everything. You need to enjoy practical work and be interested in solving scientific problems. Finally you have to be well organised in order to complete and meet all the coursework deadlines.

### What are the entry requirements?

You need GCSE grade C or above in Double Science or separate science subjects and at least grade D in English Language and Maths. If you do not have these qualifications your whole GCSE profile will be considered on an individual basis.

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

You could move onto a variety of science or engineering courses at universities or colleges, or you could start work in a technical job with further training/education opportunities.