

# IGCSE COORDINATED SCIENCE - 0654

## Why should I choose IGCSE Coordinated Science

- You will increase your understanding of the technological world.
- You will be aware of the application of science in everyday life which may be both helpful and harmful to the community and the environment.
- Develop relevant scientific attitudes, such as a concern for accuracy and precision, objectivity, integrity, enquiry, initiative, and inventiveness.
- You will be prepared to follow a wide range of courses including Cambridge A level Science subjects.

## Why study Cambridge IGCSE Coordinated Science?

As well as a subject focus, the Coordinated Science syllabus enables students to:

- acquire knowledge and understanding to become confident citizens in a technological world
- develop relevant attitudes, such as a concern for accuracy and precision, objectivity, integrity, enquiry, initiative and inventiveness
- develop skills that encourage a systematic approach to problem-solving, useful in everyday life, safe practice and effective communication through the language of science
- recognise that science is evidence-based and understand the usefulness, and the limitations, of scientific method

## Course Content:

The subject content is divided into three sections: Biology (B1-B13), Chemistry (C1-C14) and Physics (P1-P8). Candidates must study all three sections.

**Biology** – Characteristics of living organisms, cells, biological molecules, enzymes, plant nutrition, animal nutrition, transport, gas exchange and respiration, coordination and response, reproduction, inheritance, organisms and their environment, and human influences on ecosystems

**Chemistry**- The particulate nature of matter, experimental techniques, atoms, elements and compounds, stoichiometry, electricity and chemistry, energy changes in chemical reactions, chemical reactions, acids, bases and salts, the periodic table, metals, air and water, sulfur, carbonates, and organic chemistry

**Physics** – Motion, work, energy and power, thermal physics, properties of waves, electricity and magnetism, electric circuits, electromagnetic effects, and atomic physics.

## How will I learn?

A variety of learning methods are used throughout the course which include practical work, demonstration, presentations, group work, inquiry based project, interactive simulations, field research, peers and self-assessment.

## How will I be assessed?

You will be assessed by two papers that test your understanding of the content covered: one multiple-choice (45 minutes and worth 30% of the total marks) and one extended written paper (2 hours and 50% of the total); and an alternative to practical test (90 minutes and 20% of the total) that tests practical technique, data handling and analytical skills.