

# Combined Science: Trilogy

**Exam Board: AQA**  
**Course Code: 8464**

## Combined Science course overview

Combined Science is a double award GCSE through AQA. Students are placed in groups according to their ability, this enables the classroom teacher to best support your child to receive the best possible support from both their teacher and their peers. In addition, a range of scientific skills will be developed and assessed. Skills are of three key categories; scientific literacy, scientific numeracy, and scientific enquiry. These skills will be assessed in the final exams. There is opportunity for movement between groups if appropriate. The three key branches of science are studied concurrently:

### Biology

Life ranges in size from microscopic bacteria to towering redwood trees over 100 metres tall. All of life on Earth is composed of cells, understanding the function of these cells and their processes is essential to understanding the processes of life. Students will have the opportunity to explore the unseen microscopic world around us, follow the journey of food to fuel, and model astonishing medical breakthroughs of the 21<sup>st</sup> Century.

### Chemistry

Atoms, the chemical building blocks of the universe. Atoms interact with one another to form the world around us, the range of bonds and interactions create the range and variety of the world. Students will explore how two dangerous elements can be combined to produce table salt, how scientists have developed their understanding of the atom over the centuries, and will learn to safely use acids in a range of experiments.

### Physics

The modern world is reliant on effective harnessing and transfers of energy. The applications for this energy are limitless, the most common energy form we come into contact with is electrical energy. We use this every day for anything from heating food to communicating with satellites in orbit. Students will have the opportunity to quantify transfers of energy, investigate material properties to plan home renovations, and research how the world's increasing energy demands can be met.

## Who is the course for?

Combined Science is the compulsory minimum of science study for all students at The City of Leicester College at GCSE level. The course is appropriate for all students, including those who wish to pursue a career in science and technology. Science skills are universally applicable and students will find they are able to apply these skills in most contexts and vocations.

## How is the course assessed?

The course is assessed through six exams at the end of Year 11. Each exam is 75 minutes long, each exam has an equal weight towards the final grades.

## Who can contact for further advice or support?

Ms D Vaghela, Head of Department: [dvaghela@tcolc.aspirelp.uk](mailto:dvaghela@tcolc.aspirelp.uk)

Mr G Clarke, Second in Department: [GClarke@tcolc.aspirelp.uk](mailto:GClarke@tcolc.aspirelp.uk)

Mr Z Tariq, Second in Department: [ztariq@tcolc.aspirelp.uk](mailto:ztariq@tcolc.aspirelp.uk)

