

### SUBJECT GUIDE:

**Exam Board** - EDEXCEL  
**Course Code** - GCSE Combined Science (1SC0)  
**Textbook** - Edexcel GCSE (9-1) Combined Science Book  
**ISBN** - 9781292120195

### WHY GCSE PHYSICS?

The Edexcel GCSE Physics course allows pupils to discover the basic principles of Physics and it is very much geared towards the practical application of the theories.

Pupils sit two examinations at the end of the course, during the summer term. Every student must complete six compulsory practicals which do not, however, contribute to the final grade.

GCSE Physics concentrates on the traditional theories and offers a very good grounding for those who wish to continue studying Physics at A level.

The GCSE in Combined Science should enable students to:

- develop scientific knowledge and conceptual understanding through the specific disciplines of Biology, Chemistry and Physics;
- develop understanding of the nature, processes and methods of science, through different types of scientific enquiries that help them to answer scientific questions about the world around them;
- develop and learn to apply observational, practical, modelling, enquiry and problem-solving skills in the laboratory, in the field and in other learning environments;

- develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively.

### ASSESSMENT INFORMATION:

The GCSE (9–1) in Combined Science consists of SIX (2 x Biology, 2 x Chemistry & 2 x Physics) externally examined papers. Each paper lasts 1 hour 10 minutes and will contain a mixture of different question styles, including multiple-choice questions, short answer questions, calculations and extended open-response questions. These are available at foundation tier and higher tier.

### COURSE STRUCTURE:

The GCSE Physics course is divided into 15 main topics but, Topic 7- Astronomy and Topic 11 - Static Electricity are intended only for GCSE in Physics course.

## EXAMINATIONS:

### Paper 5: Physics 1

(Paper code: 1SC0/1PF, 1SC0/1PH):

Topic 1 – Key Concepts of Physics

Topic 2 – Motion and Forces

Topic 3 – Conservation of Energy

Topic 4 – Waves

Topic 5 – Light and the Electromagnetic Spectrum

Topic 6 – Radioactivity.

### Paper 6: Physics 2

(Paper code: 1SC0/2PF, 1SC0/2PH):

Topic 1 – Key Concepts of Physics

Topic 8 – Energy – Forces doing Work

Topic 9 – Forces and their Effects

Topic 10 – Electricity and Circuits

Topic 12 – Magnetism and the Motor Effect

Topic 13 – Electromagnetic Induction

Topic 14 – Particle model

Topic 15 – Forces and Matter

**Year 10:** Students study the first part of a two-year course.

**Year 11:** Students study the second part of the two-year course.

**Intensive:** Students study the complete course in one year.

## THE PHYSICS DEPARTMENT:

**Mr. Rajeeb Chakraborty - MInstP, B.Sc.(Hons.) & M.Sc. (Physics), M.Sc. (Water Pollution Control), PGCE**

Head of Physics. He is an A-Level Physics senior examiner of Edexcel Examinations Board. In addition to his extensive experience of working in both state and independent schools for a long time, Mr. Chakraborty has a unique approach to teaching Physics and has been extremely successful in motivating students. Prior to joining Regent College in 2006, Mr. Chakraborty has spent his time at Swaminarayan Independent School, London.