

Physics A Level



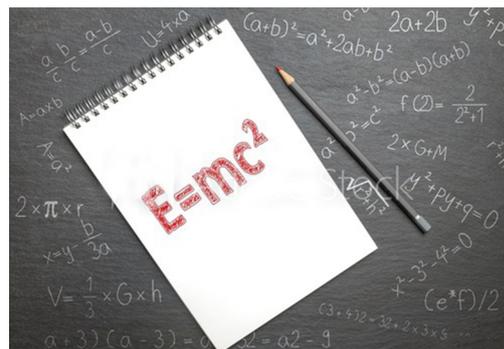
COURSE DESCRIPTION

A Level Physics at The Grey Coat Hospital covers a broad range of study including mechanics, astrophysics, nuclear physics and electromagnetism.

A full overview of the content and assessment of the course is provided overleaf.

If you enjoy learning about the world around you and how things work then you will very much enjoy this course.

A Level Physics is a highly respected course and can open doors to a huge range of university courses and future careers.



SKILLS REQUIRED

- Ability to problem solve and think logically;
- Ability to recall information and apply subject understanding to unfamiliar contexts;
- Ability to work with mathematical equations;
- Ability to use a wide range of equipment and techniques, both in the laboratory and in the field;
- Ability to apply investigative techniques, record results accurately and display them in a graphical format;
- Ability to identify and explain trends present in data;
- Ability to undertake independent research;

HEAD OF SUBJECT

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EXAM BOARD

OCR

PROGRAMME OF STUDY

Modelling Physics

Development of practical skills in physics (M1)

Foundations in physics (M2)

Forces and motion (M3)

Newtonian world and astrophysics (M5)

Exam paper (100 marks)

2 hours 15 minutes

37% of total A Level

Exploring Physics

Development of practical skills in physics (M1)

Foundations in physics (M2)

Electrons, waves and photons (M4)

Particles and medical physics (M6)

Exam paper (100 marks)

2 hours 15 minutes

37% of total A Level

Unified Physics

All modules (M1-M6) are assessed

Exam paper (70 marks)

1 hours 30 minutes

26% of total A Level

EXAMINATION RESULTS

In 2018, students achieved 36.4% A*-A grades and 90.0% A*-C grades.

6 students went on to study STEM subjects at university.

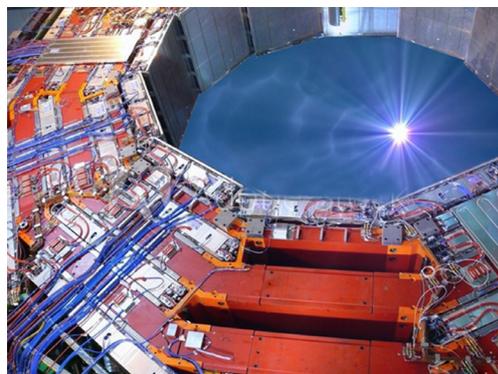
PRACTICAL ENDORSEMENT

Students will complete a minimum of 12 practical investigations, including investigating motion, waves, electrical properties, ionising radiation and quantum effects.

Practical skills are assessed in every examination.

ENRICHMENT ACTIVITIES

Every two years the physics department visit the largest collaborative science experiment in the world; the large hadron collider at CERN in Geneva, Switzerland.



FUTURE CAREERS

Studying A Level Physics opens doors to a huge range of future courses and careers and is counted as a 'facilitating' subject by the Russell Group of universities.

For many universities, A Level Physics is a pre-requisite for studying Engineering or Medicine. Students go on to study Automotive engineering, Computer Science, Mathematics, Mechanical engineering and Physics.

Our students have also been awarded positions on a wider range of degree courses, such as Biology, Chemistry and Chemical engineering.