

Subject: Physics A level

Qualification Details

OCR Physics A (H556)

Teacher Responsible

Mr Neil Collyer

Entry requirements

Grade 6 in GCSE science, or GCSE Physics and Grade 5 in Mathematics

About the Course

The A-level in Physics is designed to build upon knowledge and understanding from GCSE. It supports the mathematics and physical science units of the Construction, Design Technology and Engineering courses. Studying Physics helps to develop problem solving, analytical and evaluative skills. It is an essential subject for students who wish to go to university to study Engineering and Technology courses.

Details of Study

Year 1: Investigative skills, mechanics, basic material properties, electric circuits, progressive and standing waves, quantum phenomena.

Year 2: Investigative skills, thermodynamics, astrophysics, electric fields and capacitance, magnetic fields and induction, nuclear physics, nuclear radiation, gravitational fields and oscillations, medical imaging physics.

How is the course assessed?

The qualification is assessed with three units by external examination:

Paper 1: Modelling Physics, 2 hours 15 minutes (37% of total qualification) consisting of 15% multiple choice questions, with the remaining 85% being composed of short answer, structured and extended response questions.

Paper 2: Exploring Physics, 2 hours 15 minutes (37% of total qualification) again consisting of 15% multiple choice questions, with the remaining 85% being composed of short answer, structured and extended response questions.

Paper 3: Unified Physics, 1 hour 30 minutes (26% of total qualification) all of the paper being composed of short answer, structured and extended response questions, with no multiple choice.

Science Practical Endorsement*

This qualification will give students opportunities to use relevant apparatus and techniques to develop and demonstrate specific practical skills. These skills must be assessed through a minimum of 12 identified practical activities within each qualification. The assessment outcomes will be reported separately on students' certificates alongside the overall grade for the qualification; it does not count towards the overall A-level grade.

Future Pathways

This qualification supports progression into higher education, apprenticeship or employment, such as BSc Honours Degrees in Physics, physics-related subject such as Engineering, Science, Computing or Technology.