Website information - Faculty of Science -Physics

At Unity Academy all students study physics at both keys stage 3 and key stage 4.

KS3 (Phase 4)

The main focus of KS3 is to fully prepare students with the knowledge and skills required to excel during their GCSEs. Fundamental topics and skills are introduced in Year 7 and then built upon into Year 8. There is a strong emphasis on learning for intrinsic pleasure. Students are encouraged to enquire, to discuss and question the how's and why's of the world around us and beyond. Content is delivered in clearly defined topics with a strong emphasis on practical work. Students are assessed regularly, in formative and summative testing and also throughout lessons.

The topics covered in physics in years 7 and 8 are: Particle model; Energy; Electricity; Forces and motion; Waves (light and sound) and Space.

Key Stage 4 (Phase 5)

Students are encouraged to think, discuss and to question science, and to develop the skills element of the new GCSE through regular 'required practical' assessments. There is a strong numeracy and literacy focus in the biology GCSE, and this forms a crucial part of the teaching alongside the scientific content. Student work is assessed regularly, with feedback from teachers on how to improve, and planned opportunities to do so. Exam preparation is on-going and rigorous, ensuring that students are fully prepared for the new linear nature of the GCSEs.

The topics covered in physics in years 9, 10 and 11 are: Energy; Electricity; Particle model of matter; Atomic structure; Forces; Waves; Magnetism and Electromagnetism and Space (Separate science only.)

Regular, independent study is promoted in chemistry, at both key stages, through the use of the whole school home study policy. Students are encouraged to reflect on the learning that has taken place in the classroom by revisiting the key concepts in their own time using their reflection logs. Knowledge organisers for each topic are provided to support students with this.

Link to specification

https://filestore.aqa.org.uk/resources/physics/specifications/AQA-8463-SP-2016.PDF

Assessment at end of Key Stage 4

Paper 1:	Paper 2:
What's assessed Topics 1–4: Energy; Electricity; Particle model of matter; and Atomic structure.	**What's assessed** Topics 5–8: Forces; Waves; Magnetism and electromagnetism; and Space physics. Questions in Paper 2 may draw on an understanding of energy changes and transfers due to heating, mechanical and electrical work and the concept of energy conservation from Energy and Electricity.
How it's assessed • Written exam: 1 hour 45 minutes • Foundation and Higher Tier • 100 marks • 50 % of GCSE	**How it's assessed** • Written exam: 1 hour 45 minutes • Foundation and Higher Tier • 100 marks • 50 % of GCSE
Questions Multiple choice, structured, closed short answer and open response.	**Questions** Multiple choice, structured, closed short answer and open response.