

# **KS5** Curriculum: Physics

### **Curriculum Vision**

Exam board: OCR Physics A H556

To develop insight and understanding of the natural and physical world based on evidence and reasoning, and the pursuit of knowledge for its own sake.

## Ambitions

To develop:

- 1. Good physicists who have an interest and understanding of the living world around them.
- 2. Pupils who are able to work independently.
- 3. Pupils who are able to take risks and be confident enough to tackle tasks.
- 4. Pupils who are self-motivated to research and learn beyond the limits of specifications.
- 5. Pupils who are scientifically literate and confident with scientific language.
- 6. Students who are equipped with the knowledge and skills to move on to careers or further education in sciences, engineering and medicine.

## **Curriculum Profile**

#### Year 12

Autumn Term 1	Autumn Term 2
Module 1&2-Foundations of Physics &	Module 4-Waves 2.
Practical Skills.	Module 3-Force and motion.
Module 4-Waves 1.	Module 3-Materials.

Spring Term 1	Spring Term 2
Module 3-Laws of motion and	Module 4- Electrons.
momentum.	Module 4- Quantum Physics.
Module 3-Work, Energy and Power.	
Module 4- Electrons.	

Summer Term 1	Summer Term 2
	Module 5- Circular motion &
Module 4- Electrons.	Gravitational fields.
	Module 6-Medical Imaging.

#### Year 13

Autumn Term 1	Autumn Term 2
Module 5- Gravitational fields.	Module 5- Oscillations.
Module 5- Oscillations.	Module 5- Thermal Physics.
Module 6- Capacitance & Electric fields.	Module 6- Nuclear and Particle Physics.

Spring Term 1	Spring Term 2
Module 5- Thermal Physics.	Module 5- Astrophysics.
Module 6- Nuclear and Particle Physics.	Module 6- Electromagnetism.
Module 5- Astrophysics.	

Summer Term 1	Summer Term 2
Revision and Examination techniques.	Public Examinations.

Please note that this timeline may be subject to change.

#### Assessment and Feedback

All students will:

• Have at least one piece of assessed work reviewed by their teacher per half-term (this increases to two pieces of assessed work if students receive five or more taught hours per fortnight).

• Receive feedback which outlines how they should develop their learning. This feedback should be summative, highlighting both key strengths and key areas for development in students' work.

• Be given the opportunity to act upon their feedback in a structured task. This task should then be reviewed again by the subject teacher. A review of this task can act as the second assessed task.

#### Resources to support learning beyond the classroom

Specification:

OCR Physics A, H556

https://www.ocr.org.uk/qualifications/as-and-a-level/physics-a-h156-h556-from-2015/specification-at-a-glance/

Links to relevant websites/online resources:

Isaac Physics: <u>https://isaacphysics.org/</u>

Physics and Maths tutor: <u>https://www.physicsandmathstutor.com/physics-revision/a-level-ocr-a/</u>