

Year 12 – A Level Physics OCR A (2023 - 25) **new course**

Curriculum content:

	Year 12	Year 13
Autumn Term	Practical Skills Ch2 – Foundations of Physics Ch3 – Motion Ch4 – Forces in Action Ch5 – Work Power and Energy Ch8 – Charge and Current Ch9 – Energy, Power and Resistance Ch10 – Electrical Circuits	Ch15 – Ideal Gases Ch16 – Circular Motion Ch17 – Oscillations Ch18 – Gravitational Fields Ch22 – Electric Fields Ch23 – Magnetic Fields Ch24 – Particle Physics Ch25 - Radioactivity
Spring Term	Ch6 – Materials Ch7 – Newton's Laws and Momentum Ch10 – Waves (Part 1) Ch11 – Waves (Part 2) Ch12 - Quantum	Ch19 – Stars Ch20 – Cosmology Ch26 – Nuclear Physics Ch27 – Medical Physics
Summer Term	Ch14 – Thermal Physics Ch21 - Capacitors	-

Outgoing Course - Year 13 - A Level Physics OCR B (Advancing Physics) (2023/2024)

Curriculum content:

	Year 12	Year 13
Autumn Term	Practical Skills Ch 1 and 2 Communication Ch 3 Sensing Ch 4 and 5 Materials	Ch 10 and 11 – Mathematical Modelling Ch 12 The Gravitational Field Ch13 Our Place in the Universe Ch 14 and 15 – Models of Matter
Spring Term	Ch 6 and 7 Wave and Quantum Behaviour	Ch 16 - Electromagnetism Ch 17 – The Electric Field Ch 18 – Modelling the Atom Ch 19` – Ionising Radiation
Summer Term	Ch 8 and 9 Space Motion and Time	

Skills:

- Scientific thinking
- Experimental skills and strategies
- Analysis and evaluation
- Scientific vocabulary, quantities, units, symbols and nomenclature
- Problem solving
- Mathematical Skills
- Explanations of phenomenon
- Safe working practices during experiments
- Proficient use of technical language

Assessment – OCR A Physics (new course)

Paper	Paper 1: Modelling Physics (37%)	Paper 2: Exploring Physics (36%)	Paper 3: Unified Physics (26%)
Topics covered	Modules 1,2,3 and 5	Modules 1,2,4 and 6	Modules 1-6
Length of exam	2hr15	2hr15	1hr30
Marks available	100	100	70

Content is in six modules:

- Module 1: Development of practical skills in physics
- Module 2: Foundations in physics
- Module 3: Forces and motion
- Module 4: Electrons, waves and photons
- Module 5: Newtonian world and astrophysics
- Module 6: Particles and medical physics

There is also a Practical Endorsement, which is a separate qualification and graded either pass or fail. This involves the completion of a range of practical activities that will ensure the completion of all the Common Practical Assessment Criteria (CPAC), as specified by OCR.

More information on the specification and assessments can be found on the OCR website: <https://www.ocr.org.uk/qualifications/as-and-a-level/physics-a-h156-h556-from-2015/>

Outgoing - OCR B (Advancing Physics) Assessment: (last exams Summer 2024)

Paper	Paper 1	Paper 2	Paper 3
Length of Exam	2hr15	2hr15	1hr30
Marks Available	110	100	60

Paper 1 - H557/01 Fundamentals of Physics

- Section A – Multiple Choice (30 marks)
- Section B - Short Answer (max 4 marks per question)
- Section C – Longer Answer questions (including literacy marking)

Paper 2 - H557/02 Scientific Literacy in Physics

- Section A – Short Answer/Warm Up
- Section B – In depth questions (inc. literacy) up to 6 marks on all topics
- Section C – Questions based on Pre-release material (inc. literacy)

Paper 3 - H557/03 Practical Skills in Physics

- Section A – Variety of experiments assessed.
- Section B – In depth analysis of one/two practicals

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