A Level Physics

An Introduction

AS Physics

Content Overview	Assessment Overview	
Content is split into four teaching modules: • Module 1 – Development of practical skills in physics • Module 2 – Foundations of physics • Module 3 – Forces and motion • Module 4 – Electrons, waves and photons Both components assess content from all four modules.	Breadth in physics (01) 70 marks 1 hour 30 minutes written paper	**50%** of total AS level
	Depth in physics (02) 70 marks 1 hour 30 minutes written paper	**50%** of total AS level

Both components include synoptic assessment.

- The AS course does not count towards the A Level

A Level Physics

Modules 1-4 are taught in Yr12, but all modules are examined in Yr13.

Content Overview	Assessment Overview	
Content is split into six teaching modules: • Module 1 – Development of practical skills in physics • Module 2 – Foundations of physics • Module 3 – Forces and motion • Module 4 – Electrons, waves and photons • Module 5 – Newtonian world and astrophysics • Module 6 – Particles and medical physics Component 01 assesses content from modules 1, 2, 3 and 5. Component 02 assesses content from modules 1, 2, 4 and 6. Component 03 assesses content from all modules (1 to 6).	Modelling physics (01) 100 marks 2 hours 15 minutes written paper	**37%** of total A level
	Exploring physics (02) 100 marks 2 hours 15 minutes written paper	**37%** of total A level
	Unified physics (03) 70 marks 1 hour 30 minutes written paper	**26%** of total A level
	Practical endorsement in physics (04)* (non exam assessment)	Reported separately (see Section 5h)

Module 1 Development of Practical Skills in Physics.

- Not taught as a separate Module.
- Consists of a series of 12 practical assignments to be completed in lessons alongside the teaching of the topics concerned.
  - You need:
    - To hand in evidence that you have completed the practical.
    - Me to observe you doing the practical.
  - Reported separately from your grade as a Pass/Fail.
  - **Practical skills will also be assessed in the written exams.**

Modules 2 - 4

Module 2 – Foundations of physics

- 2.1 Physical quantities and units
- 2.2 Making measurements and analysing data
- 2.3 Nature of quantities

Module 3 – Forces and motion

- 3.1 Motion
- 3.2 Forces in action
- 3.3 Work, energy and power
- 3.4 Materials
- 3.5 Newton's laws of motion and momentum

Module 4 – Electrons, waves and photons

- 4.1 Charge and current
- 4.2 Energy, power and resistance
- 4.3 Electrical circuits
- 4.4 Waves
- 4.5 Quantum physics

Types of Exam Questions

Learners are expected to demonstrate their ability to:

	Assessment Objective	
AO1	Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.	35%
AO2	Apply knowledge and understanding of scientific ideas, processes, techniques and procedures: • in a theoretical context • in a practical context • when handling qualitative data • when handling quantitative data.	40%
AO3	Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to: • make judgements and reach conclusions • develop and refine practical design and procedures.	25%

What do I expect of you?

- 100% attendance
- Punctual start to lessons
- Comprehensive notes taken
- Notes filed & well organised
- Homework handed in on time
- Appropriate behaviour in class
- To ask for help if ever you need it
- Self study to back up lessons in school

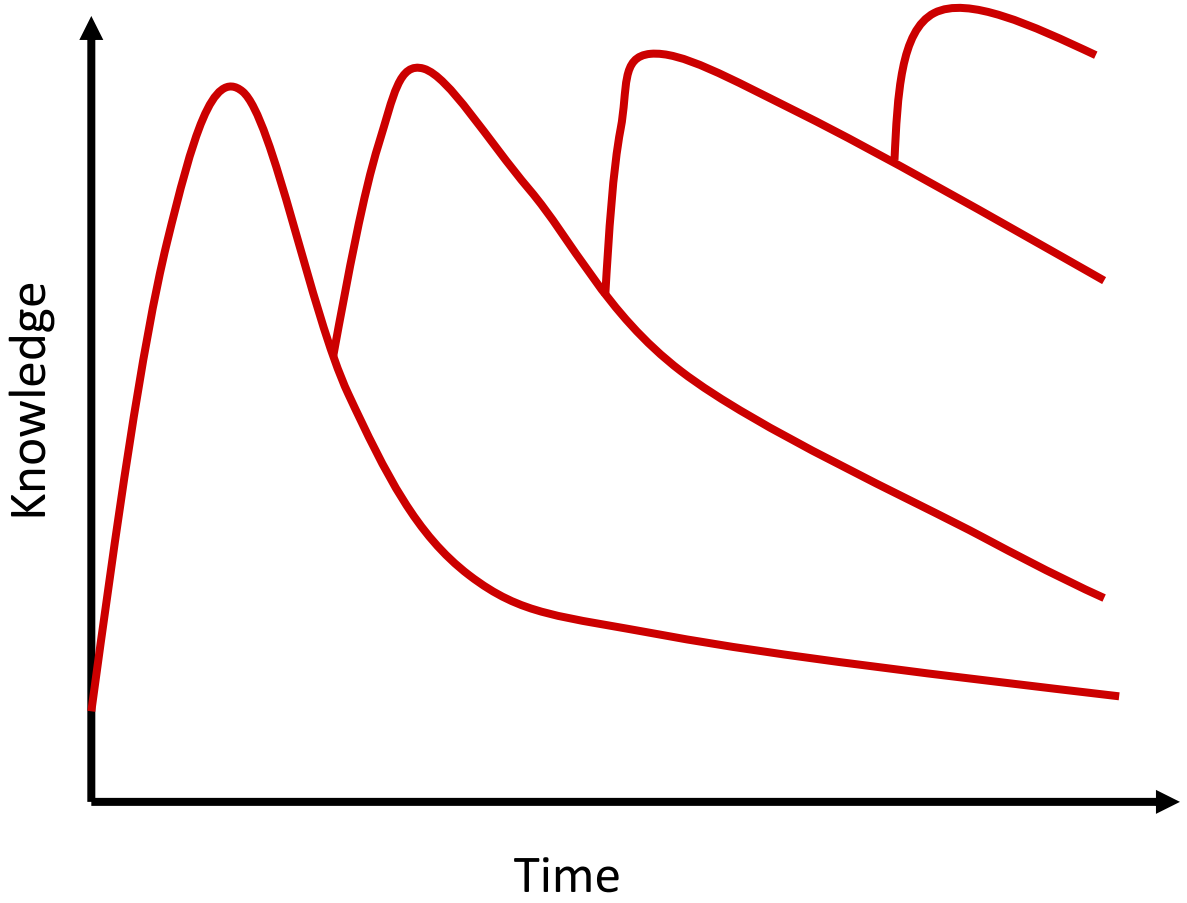
How to get a good grade…

- What's the difference between students who get A*/A and those who get E/U?
  - Little to do with the lessons
  - More to do with activities outside the classroom.

So what can you do?

- Out of class study:
  - Review & improve your notes after each lesson.
  - Use textbook and other relevant materials.
  - Ensure you fully understand everything and make up mnemonics to help you remember it.
  - Complete the relevant questions in the textbook.
  - Practise over and over again the equations and how they can be used.
  - Review again at the end of the week/month.

How does this help?



What else?

- Use your course specification.
  - It contains details of **everything** you can be examined on.
  - Use it to check your progress and understanding.

- Complete past exam questions
  - You can download past papers from the OCR website.

Finally…

- You should enjoy the course.
  - The more you enjoy & engage with this course, the more you will find links to it in everyday life.
  - These links help with remembering details by making it relevant.