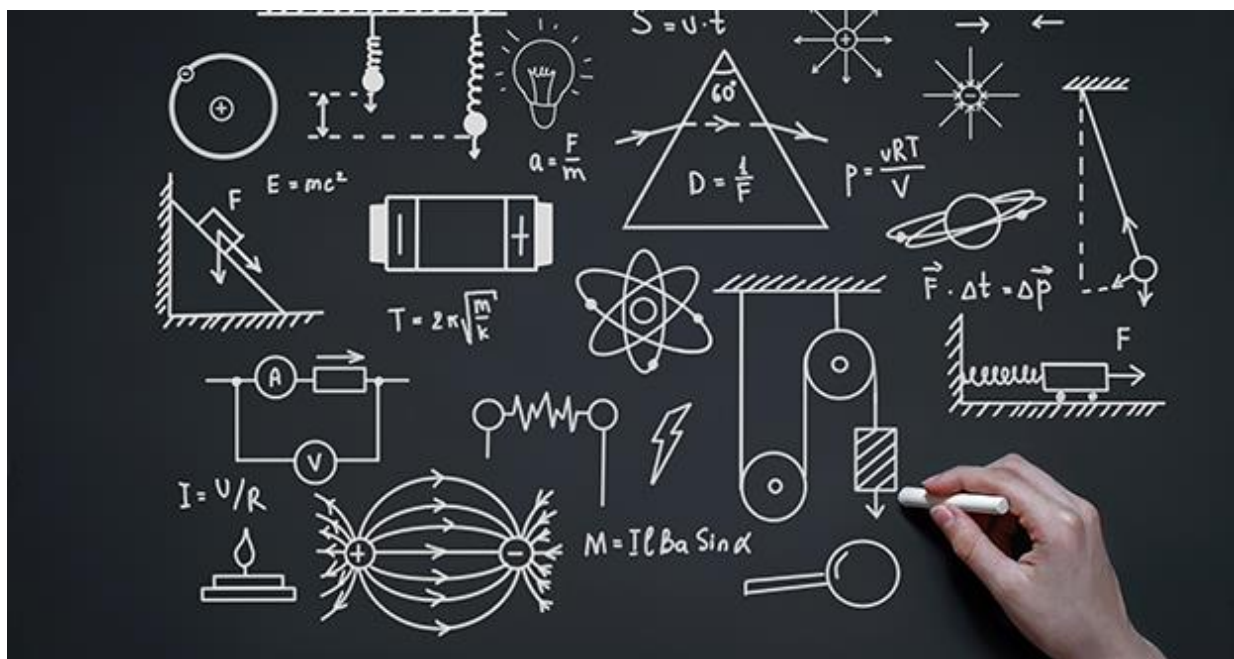


A Level Physics

Course Handbook

2023-2025





Expectations in A Level Physics



1. Your attendance at **ALL** lessons is **COMPULSORY**.
2. If you do miss any lessons you **MUST** copy the work up before the next lesson. Any points of confusion **YOU** need to follow up! (You can contact your teachers by email if you can't track them down!)
3. All deadlines should be adhered to. If there are extenuating circumstances, then talk to your teacher **BEFORE** the deadline!
4. A level study is hard and different to GCSE – so you need to use your teacher as a resource and **ASK** for help if you need it. Don't just hope it will all make sense later!
5. Get involved in **ALL** lessons by asking and answering at least 3 questions each time.
6. Listen respectfully to the views of others, even if you don't agree with them.
7. Ensure that your folder is kept up-to-date and bring it to **ALL** lessons with the current topic/units' work.
8. Please ensure that you follow the Sixth Form rules, especially in relation to dress code (coats and hats off in lesson) and mobile phones.

Presentation in A Level Physics

1. All work should be kept in a folder just for Physics and this must be clearly labelled.
2. This course handbook should be at the front of your folder.
3. Your progress log should be kept in the Assessment section of your folder, clearly labelled and kept up-to-date. All assessed work (essays, tests etc.) should also be put in this section of your folder.
4. All topics should be sorted into sections using clearly labelled dividers.
5. **ALL** pieces of work should have a title and date.
6. **NO** graffiti or doodling on your work or folder.



Organising your folder

In year 12 you need two big lever arch folders but you can just buy one for now and one after Christmas.

The first document will be your Physics handbook, this needs to stay at the front of your folder. The rest of your folder will need to be split into following using dividers (you do not need all these at the start, your teacher will tell you how to arrange your folder):

- **Unit 3 Mechanics (Paper 1)**
 - Topic workbook
 - Topic checklist
 - Topic definitions
 - Written notes from each lesson
 - SWYK and feedback
- **Unit 3 Materials (Paper 1)**
 - Topic workbook
 - Topic checklist
 - Topic definitions
 - Written notes from each lesson
 - SWYK and feedback
- **Unit 4 Electricity (Paper 2)**
 - Topic workbook
 - Topic checklist
 - Topic definitions
 - Written notes from each lesson
 - SWYK and feedback
- **Unit 4 Waves (Paper 2)**
 - Topic workbook
 - Topic checklist
 - Topic definitions
 - Written notes from each lesson
 - SWYK and feedback
- **Unit 4 Quantum (Paper 2)**
 - Topic workbook
 - Topic checklist
 - Topic definitions
 - Written notes from each lesson
 - SWYK and feedback
- **Unit 5 Circular motion (Paper 1)**
 - Topic workbook
 - Topic checklist
 - Topic definitions
 - Written notes from each lesson
 - SWYK and feedback
- **Assessments**
 - Progress log
 - Any larger assessments
 - Feedback sheets

What will I study?

YEAR 12 OVERVIEW

HALF TERM	TOPICS TAUGHT
1	Mechanics
2	Mechanics Materials
3	Electricity Waves
4	Electricity Waves
5	Revision
6	Circular motion

What will my exams look like?

Paper 1 – Modelling Physics

100 Marks

2 hours 15 minutes

37% Weighting

Units 1, 2, 3 and 5

Paper 2 – Exploring Physics

100 Marks

2 hours 15 minutes

37% Weighting

Units 1, 2, 4 and 6

Paper 3 – Unified Physics

70 Marks

1 hour 30 minutes

26% Weighting

All units covered

Practical Endorsement

Not examined at the end of the two years, assessed throughout through PAGs.

There are no grades rewards for the practical endorsement, only Pass/Fail. This will be shown on your exam transcript alongside your other A Levels. Many universities require this as part of their conditional offer.

Independent Study

In Sixth Form you have more unstructured time than you have been used to at GCSE. You need to use this time productively by doing independent study for your subjects. You will have homework set each week but there are a number of additional things you can do during this time to help your understanding.

- Complete Isaac Physics boards on the topics you have completed
- Complete units on Uplearn
- Ensure your workbook is completed up to date
- Watch Youtube videos on sections of the course that we have covered or as a pre-learning activity
- Read notes on future topics
- Test your knowledge on Carousel
- Complete questions and tasks out of the textbook/revision guides

Extra-Curricular Study

YouTube channels



There are some excellent Youtube channels for exploring the Physics concepts you will encounter as A Level and beyond, you may want to have a look at the following:

[minutephysics](#)



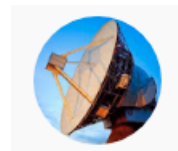
[Veritasium](#)



[Sixty Symbols](#)



[Backstage Science](#)



[The Royal Institution](#)



[Dr Becky](#)



Podcasts

Some of these are more general but they all have loads of great content including physics related episodes.

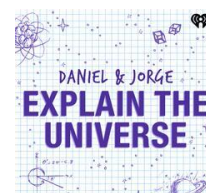
The Infinite Mokey Cage



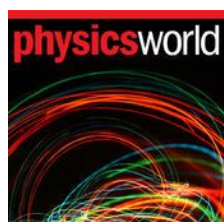
The Life Scientific



Daniel and Jorge Explain the Universe



Physics World



In Our Time



Warwick University Monday Journal club found here:

<https://warwick.ac.uk/fac/sci/physics/outreach/journalclub/>

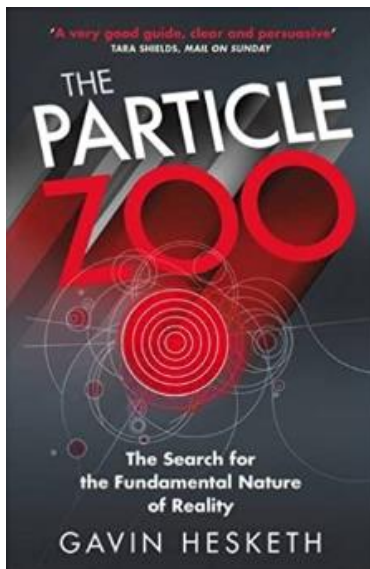
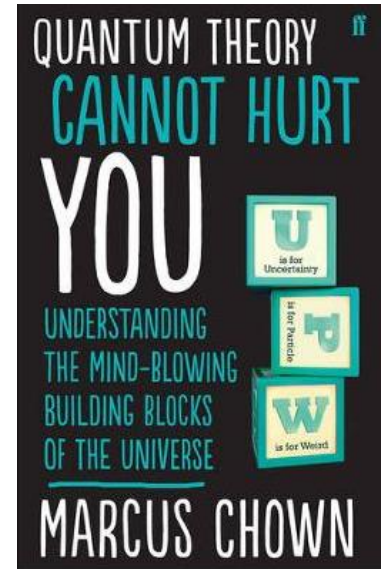
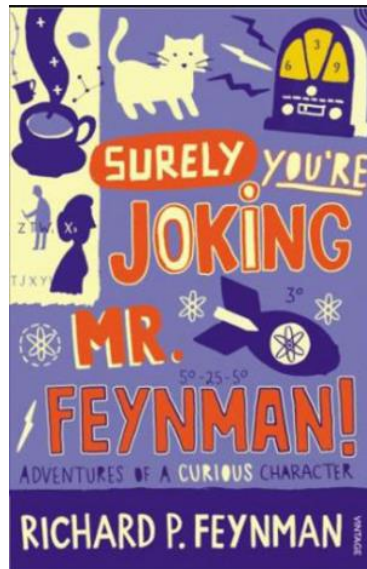
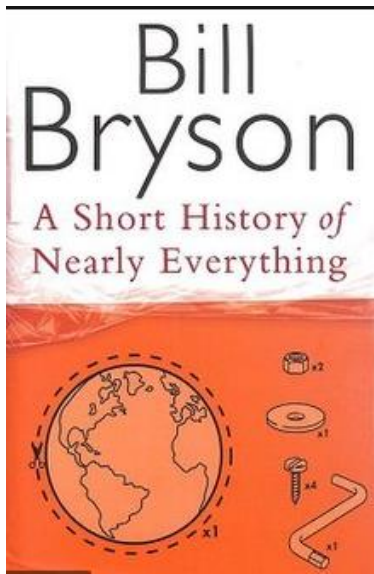
Write your notes in Cornell Notes style. Check your answers the following week to see how you got on.

There is no marks here for how accurate your answers are, you are gaining valuable research and notetaking skills, therefore the quality of your research and notes is what is taken into account.

Complete any of the following courses from the Open University:

- <https://www.open.edu/openlearn/science-maths-technology/particle-physics/content-section-0?active-tab=description-tab>
- <https://www.open.edu/openlearn/science-maths-technology/mathematics-science-and-technology/content-section-overview?active-tab=content-tab>
- <https://www.open.edu/openlearn/science-maths-technology/scales-space-and-time/content-section-0?active-tab=content-tab>

Book Recommendations



HELEN CZERSKI

"A delightful book on the joys and universality of physics... Czernski's enthusiasm is infectious"
JIM AL-KHALILI

