# HIGHER PHYSICS ESSENTIAL INFORMATION

**Which topics are covered at Higher?**

| | |
|---|---|
| Our Dynamic Universe | Motion – equations and graphs |
| | Forces, energy and power |
| | Collisions, explosions and impulse |
| | Gravitation |
| | Special relativity |
| | The expanding Universe |
| Particles and Waves | Forces on charged particles |
| | The Standard Model |
| | Nuclear reactions |
| | Inverse square law |
| | Interference |
| | Spectra |
| | Refraction of light |
| Electricity | Monitoring and measuring AC |
| | Current, potential difference, power and resistance |
| | Electrical sources and internal resistance |
| | Capacitors |
| | Semiconductors and p-n junctions |

**What apps and websites can I use to support my learning?**

https://scholar.hw.ac.uk/courses/
https://www.bbc.co.uk/bitesize/subjects/zpyb4wx
https://www.sqa.org.uk/pastpapers/findpastpaper.htm
https://www.youtube.com/@MrMitchellPhysics
https://www.youtube.com/@MrSmithsPhysicsonline

**Are there important dates of which I should I be aware?**

Sep/Oct – Formal Assessment Phase 1
January – Formal Assessment Phase 2
Mar – Assignment (20% of final grade)
May – Final exam

**How is the course assessed?**

| COMPONENT | DETAILS | LENGTH | MARKS | SCALED | % |
|---|---|---|---|---|---|
| **FINAL EXAM Paper 1:** | **Multiple Choice** | 45 minutes | 25 marks | 25 marks | 16.7% |
| **FINAL EXAM Paper 2:** | **Short Response Questions** | 2 hours 15 mins | 130 marks | 95 marks | 63.3% |
| **INTERNAL EXAM: Assignment** | Assignment - undertaken in class under close supervision. Submitted to SQA for marking | 8 hours, of which a maximum of 2 hours is allowed for the report stage | 20 marks | 30 marks | 20% |

**What resources do I need?**

**Resources from lessons** (One Note and Teams)
**Login details** to essential websites (above)

**Where can I find more information about the exam and assignment?**

The SQA Understanding Standards provides exemplars and grades awarded.
https://www.understandingstandards.org.uk/

**Where do I find the past papers?**

These are on One Note but you will also find past papers back to 2018 on the SQA site.
https://www.sqa.org.uk/pastpapers/findpastpaper.htm

**Where do I find more information about the course?**

https://www.sqa.org.uk/files_ccc/HigherCourseSpecPhysics.pdf

**What else can I do to improve?**

Attempt past papers (blind to marking instructions) and then check your answers.
Pay particular attention to command words in past paper questions and what the answer requires.
Practise use of your calculator.
Learn the SI Unit prefixes and practise use of indices.
Read the course reports (https://www.sqa.org.uk/sqa/47916.html) to see the common errors made by candidates.
Consistently use the "equation, substitution, final answer" method for calculations.
Practise using the relationship sheet and data sheet when answering questions.

**How do I ensure top marks?**

Work consistently throughout the year.
Listen to and act on teacher feedback.
Prepare for all assessments.
Take advantage of study support opportunities.