

Welcome!

Douglas Academy Physics Department

Family Learning Evening

Agenda/Topics to Be Covered

- Staff
- Class Materials
- Dates and Deadlines
- SQA Assessment
- Help and support

Staff

• Mrs Amanda McVicar - Principal teacher

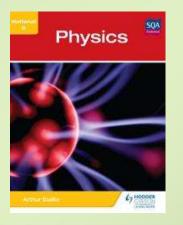
- Mr Paul Dudman
- Miss Kate McPherson
- Mr Joshua Brown

Class materials

- White notes completed during lessons. Highlighted important information. Space for experimental data to be recorded.
- Blue question sheets completed during lessons.
 Practise of new equations.
- Pink sheets ink exercise homeworks. Handed in for marking. Not all exercises are completed for every topic - additional / revision questions in some topics

Additional resources

- National 5 Textbook
- Pupil record card
- Summary notes
- Mandatory Key Area statements



Supported study

- After school, formal supported study runs from after the October week to the prelims.
 Pupils need to sign up for this and agree to attend. (Will also run again in the weeks leading to the main exams)
- Lunchtime informal supported study runs on Tuesday, Wednesday and Thursday lunchtimes, from 1pm to 1.30pm. Pupils can drop in as required.

Dates and Deadlines

- October test before October holiday.
- Prelim end of November
- Assignment (more details later) -December / January
- SQA Physics exam Thursday 30th April 2020 (p.m.)

SQA Assessment information

- Exam is 2 ¹/₂ hours long.
- 25 multiple choice
- 110 marks written paper
 this is then scaled to be out of 75.
- •20 marks Assignment
 - this is then scaled to be out of 25.

Course content - units

Dynamics

Vectors and scalars; velocity-time graphs; acceleration; Newton's laws; energy; projectile motion.

Space

Space exploration; cosmology.

Electricity

Electrical charge carriers; potential difference (voltage); Ohm's law; practical electrical and electronic circuits; electrical power.

Properties of matter

Specific heat capacity; specific latent heat; gas laws & the kinetic model.

Waves

Wave parameters and behaviours; electromagnetic spectrum; refraction of light.

Radiation

Nuclear radiation.

Assignment

- The assignment has two stages: research and report.
- The **research** stage must involve an experiment which allows measurements to be made.
 - Candidates must also gather data from the internet, books and/or journals to compare against their experimental results.
- Candidates must produce a report on their research.

Assignment

- Marking
 - The report is submitted to SQA for external marking.
 - -All marking is quality assured by SQA.

Assignment - Controlled assessment conditions

- Controlled assessment is designed to: ensure that all candidates spend approximately the same amount of time on their assignments
- prevent third parties from providing inappropriate levels of guidance and input
- mitigate concerns about plagiarism and improve the reliability and validity of SQA awards
- allow centres a reasonable degree of freedom and control
- allow candidates to produce an original piece of work

Assignment - Controlled assessment conditions

Under a high degree of supervision and control	Under some supervision and control
 the use of resources is tightly prescribed all candidates are within direct sight of the supervisor throughout the session(s) display materials which might provide assistance are removed or covered there is no access to e-mail, the internet or mobile phones candidates complete their work independently interaction with other candidates does not occur no assistance of any description is provided 	 candidates do not need to be directly supervised at all times the use of resources, including the internet, is not tightly prescribed the work an individual candidate submits for assessment is their own teachers and lecturers can provide reasonable assistance

Assignment - Controlled assessment conditions

Stage	Level of control
 research 	conducted under some supervision and control
 report 	conducted under a high degree of supervision and control

- It is recommended that no more than 8 hours is spent on the whole assignment.
- A maximum of 1 hour and 30 minutes is allowed for the report stage.
- The instructions for candidates outline the requirements for the assignment and must be issued to candidates at the outset.
- Teachers and lecturers must ensure candidates understand the requirements of the task.
- It is not permitted at any stage to provide a template or model answers.

Useful websites

SQA National 5 Physics page

 https://www.sqa.org.uk/sqa/45731.html

BBC Bitesize National 5 Physics

http://www.bbc.co.uk/education/subjects/z6fsgk7

Mr MacKenzie's National 5 Physics

 <u>http://mrmackenzie.co.uk/national-5/</u>