

SUBJECT: PHYSICS IB STANDARD

**HEAD OF DEPARTMENT:
MRS K ARDLEY
POINT OF CONTACT
MRS K ARDLEY**

FIRST ASSESSMENT 2016

SYNOPSIS OF CONTENT

The course comprises a central core of study which covers the following topics:

1. Measurements and uncertainties
2. Mechanics
3. Thermal physics
4. Waves
5. Electricity and magnetism
6. Circular motion and gravitation
7. Atomic, nuclear and particle physics
8. Energy production

Students also study one extension module.

SKILLS THAT WILL BE DEVELOPED

An interest in, and enthusiasm for, Physics.
Appreciation of how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.
An understanding of the nature of science.
Essential knowledge and understanding of different areas of Physics and how they relate to each other.
Practical investigation skills and personal engagement with a project of choice.

SOME USEFUL WEBSITES

<http://www.saburchill.com/physics/physics.html>
(The Open Door Website)

<http://hyperphysics.phy-astr.gsu.edu/hbase/hframe.html>
(Hyperphysics website)

ASSESSMENT

Paper 1 – ¾ hour – 30 multiple choice questions on the core topics. – 20%

Paper 2 – 1¼ hours – A data based question, several short answer questions and 1 extended response questions. – 40%

Paper 3 - 1 hour Section A two or three short answer questions based on experimental skills and techniques and analysis and evaluation of unseen data. Section B several short answer questions and extended response questions from the extension module.– 20%

Internal assessment of an individual investigation which will involve practical work – 20%

SPECIFIC MATRICULATION REQUIREMENTS

A **grade C** is required in Additional Science including a grade C in the Physics component, or Physics GCSE. A **grade 5** is also required in GCSE Mathematics.

OTHER INFORMATION **Eg Field Trips/expenses/books**

Students may wish to purchase their own copy of the new textbook Physics for the IB Diploma (sixth edition), ISBN: 9781107628199