



Haverhill 14-19  
LearningPartnership

## A-Level Physics

### Course information

#### Why choose A-Level Physics?

If you have an inquisitive mind and want to understand HOW the world works, the study of physics will provide many of the answers. This course will develop your essential scientific knowledge and understanding, as well as establish sound links between theory and experiment.

A-level Physics is an important qualification for many careers. Some students go on to study physics at university. This may lead to a career in research and development, either in a university or in industry. Perhaps the majority of those who study A-level Physics do so in order to apply their physics knowledge in another subject area at university.

A-Level Physics can also lead to a wide range of careers. This includes Applied Physics, Astrophysics, Geophysics, Material technology, Forensic science, Engineering, Meteorology, Medical Physics. Also complementary with intended careers in Medicine, Mathematics, Computing, Finance, Law, Accountancy and many more areas

Some group of students may choose physics simply because they enjoy it or because they know that it is highly regarded by universities as a test of problem-solving ability and logical thought. The ability to work in groups as well as independently is paramount in your development during the course.

## Course Outline:

---

Exam Board: EDEXCEL

### ***AS Physics – 8PH01 / A2 Physics – 9PH01***

Salters Horners Advanced Physics is a context-led course placing students' learning in the environment and in situations in which physics is met in real life

In total there are eleven context areas through which the physics is developed (six Advanced Subsidiary AS and five Advanced A/A2). The study of them all is compulsory. The examinations, and indeed the course materials, point to other places in which the same physics is used. A brief overview of the scheme is provided below.

### **AS Physics**

#### ***1st assessment unit: (80 Marks)***

HFS – Higher Faster Stronger – Biomechanics and the Physics of Sports  
EAT – Good Enough to Eat - Physics of the Food Industry  
SUR – Spare Part Surgery – Medical Physics

#### ***2nd assessment unit: (80 Marks)***

MUS – Sound of Music – Physics of Music  
SPC – Technology in Space – Physics of Satellites  
DIG – Digging Up The Past – Physics of Archaeology

#### ***3rd assessment unit: AS coursework (40 Marks)***

### **A2 - Physics**

#### ***4th assessment unit (80 Marks):***

TRA – Transport on Track – Physics of Transport  
MDM – Medium is The Message – Physics of Communications  
PRO – Probing the Heart of Matter – Nuclear Physics

#### ***5th assessment unit (80 Marks):***

BLD – Build or Bust – Physics of Structures and Earthquakes  
STA – Reach for the Stars – Astrophysics

#### ***6th assessment unit: A2 coursework (40 Marks)***

## Resources and facilities:

---

### Books

- AS/A2 Salters Horners Advanced Physics – *Heinemann*
- AS/A2 Salters Horners Advanced Physics Revision Guides – *Heinemann*
- Other Advanced Physics Books available in our Physics Library (Room B6)

### For useful web links on the course go to :

- [http://www.york.ac.uk/org/seg/salters/physics/othercontacts/useful\\_links.html](http://www.york.ac.uk/org/seg/salters/physics/othercontacts/useful_links.html)

## Careers and progression:

---

For information about university courses on physics and the possible career pathways go to:

- [www.iop.org](http://www.iop.org) (Institute of Physics)
- [www.physics.org](http://www.physics.org) (everything about physics)

**Past students doing:** Physics, Biochemistry, Computer Science, Maths, Chemical Engineering, Electrical Engineering,

## Entry requirements:

---

GCSE grades: Science “B” or above and Maths “B” or above

It is very advisable to take A-level Maths in conjunction with A-level Physics, though not a requirement. But do not be fooled as there is quite a lot of maths in the physics course.

## A Level results:

---

2005/2006 100 % A-B's (1 Student)

2006/2007 100 % A-D's (5 Students) / 100% A-B's (2 Students) (AS Level)

Current numbers 2007/2008

- AS Level - 13 Students
- A2 Students – 2 Students

## **Enquiries:**

---

All enquiries regarding this course should be made to Mr R Capra, via Samuel Ward Arts and Technology College or e-mail to [rcapra@samuelward.suffolk.sch.uk](mailto:rcapra@samuelward.suffolk.sch.uk)