

Curriculum Overview:

Students in Year 10 will study one of the following courses: Double award, Triple award or BTEC First Principles of Applied Science.

Double award:

Students will complete Gateway Science B in Year 10 and Gateway Additional Science B in Year 11 leading to the award of two GCSEs in Science.

The Key Stage 4 programme identifies the activities and experiences students will come across in everyday life, and links these to scientific ideas and their implications for society. It will provide the opportunity to acquire the scientific skills, knowledge and understanding necessary for life as a citizen.

In the **Gateway Science Suite** students study units, which cover the three main content areas of the National Curriculum for Science. These areas are:

Sc2 - Life And Living Processes

Sc3 - Materials And Their Properties

Sc4 - Physical Processes

Triple award:

This course is most suitable for learners with a level 6 or above in Science at the end of Key Stage 3. The triple science course has been developed to emphasise explanations, theories and modelling in science along with the implications of science for society. Strong emphasis will be placed on the active involvement of students in the learning process and the specification encourages a wide range of teaching and learning activities. This year they are doing the Physics GCSE which comprises of the following modules:

Physics:

Energy for the home	Living for the future (Energy resources)	Forces for transport
Radiation for life	Space for reflection	Electricity for gadgets

BTEC First Principles of Applied Science Award:

The Principles of Applied Science Award delivers the Key Stage 4 Programme of Study for science by covering the key scientific principles vital for both scientists and citizens of the future. It develops and exemplifies these principles in applied and vocational contexts, leading to an understanding of how the principles are applied in practice whilst building the skills required both for the scientific workplace and for further study.

Units of work Covered:

Award: Principles of Applied Science (Year 10)	Award: Application of Science (Year 10)
(Equivalent to one GCSE)	(Equivalent to one GCSE)
Unit 1: Principles of Science *	Unit 5: Application of Chemical Substances
Unit 2: Chemistry and our Earth	Unit 6: Application of Physical Science

Unit 3: Energy and our Universe	Unit 7: Health Applications of Life Science
Unit 4: Biology and our Environment	Unit 8: Scientific Skills *
* Unit is externally assessed	* Unit is externally assessed
30 GLH per unit	30 GLH per unit

Homework & Assessments Overview:

Double and triple award: Homework is given on a weekly basis and is completed in a revision workbook which has been provided by the department. Additional homework is provided to support exam preparation and coursework preparation. Exams are outlined in the school calendar. Students will be sitting two exam papers in the summer 2015. Core will be sitting B1C1P1 and B2C2P2 whereas Physics will be sitting P123 and P456.

BTEC Principles of Applied Science Award:

Homework is in the form of assignments which are given with deadlines throughout the year. There is one external exam.

Useful Websites:

<http://www.bbc.co.uk/education/subjects/zrkw2hv>
<http://www.bbc.co.uk/programmes/b00lwxj1>
http://www.bbc.co.uk/news/science_and_environment/

Practical tips / activities for parents to support learning at home:

- Visits to the science museum and the natural history museum are always useful.
- Talk to your child about what they are studying and get them to explain what they have learnt in lessons.
- Try some experiments together with your child such as those outlined in “the little book of experiments” (available as a pdf from the science department)