

Science

Teachers: Helen Booth and Maria Brennan

The Science department offer practical and theoretical engaging lessons. All KS3 pupils study a three year rolling programme which covers units in Biology, Chemistry and Physics. The programme covers the skills outlined in the National Curriculum. It offers a clear transition and progression from KS3 to KS4. Students in Key Stage 4 will have the opportunity to study either Entry Level Science Award or Dual Award Science GCSE.

Schemes of work:

Year One (3 year rolling program)

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
Atoms elements and compounds	Energetics	Cellular Respiration	Photosynthesis	Nutrition and Digestion	Current electricity
Particle model/nature of matter	Energy in matter	Gas exchange systems		Health	Static electricity
Physical changes					Magnetism

Year two (3 year rolling program)

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
Forces/describing motion	Calculating of fuel uses and costs	Earth and Atmosphere	Reproduction	Chemical reactions (acids and alkalis)	Space Physics
Balanced Forces	Changes in systems		Skelton and muscular systems	Energy changes and transfers	
Forces and motion					
Pressure in fluids					

Year three (3 year rolling program)

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
Cells and organisation	Inheritance, chromosomes, DNA and genes	Periodic table	Pure and impure substances	Observed waves	Relationships in an ecosystem
		Materials		Sound waves	
				energy and waves	
				Light wave	

Key Stage 4 ELC Science

Year 10

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
The human body		Elements, mixtures and compounds		Energy, forces and the structure of matter	
What is the body made of	Fighting disease	Atoms, elements, compounds	Metals and alloys	Energy	Speed and stopping distances
How the body works	How the body is coordinated	Mixtures and compounds		Forces at work	Atoms and nuclear radiation

Year 11

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
Environment, evolution and inheritance		Chemistry in our world		Electricity, magnetism and waves	
Feeding relationships	How life developed on Earth	Reactions of acids	Fuels and the atmosphere	Electrical current	Waves
Organisms and the environment		Energy and rate of reaction	Water for drinking	Domestic electricity	Electromagnetic waves
				Magnetism and electromagnetism	

Key Stage 4 GCSE Science

Year 10

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
B1: You and your genes C1: Air and water	P1: Radiation and waves B2: Keeping healthy	C2: Chemical patterns P2: Sustainable energy	P2: Sustainable energy (Continued) B3: Living together – food and Ecosystems	B3: Living together – food and Ecosystems (Continued) C3: Chemicals of the natural environment	C3: Chemicals of the natural Environment (continued) P3: Electric circuits

Year 11

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
B4: Using food and controlling growth C4: Material choices	P4: Explaining motion B5: The human body – staying alive	C5: Chemical analysis P5: Radioactive materials B6: Life on Earth – past, present and Future	C6: Making useful chemicals P6: Matter – models and explanations	Revision and Summer Series Examinations	Revision and Summer Series Examinations

Syllabus materials KS4:

[Entry Level - Science - R483 \(from 2016\) – OCR](#)

[GCSE - Twenty First Century Science Suite - Combined Science B \(9-1\) - J260 \(from 2016\) - OCR](#)

Careers in Science:

[1438 My Learning My Future Science FINAL.pdf \(careersandenterprise.co.uk\)](#)