



Our Science curriculum intent at Swanshurst, is to encourage a healthy curiosity for Science in all of our students. We develop this through broad, exciting, practical hands-on learning experiences that encourage questioning and investigation of the changing world around us.

We aim to inspire enquiring minds, and develop lifelong learners who are critical scientific thinkers. We also aim to challenge misconceptions, and push boundaries to promote opportunities for all young women in STEM wherever we can.

Key Stage 3

Year 7

Introduction: Working Scientifically

Biology:

B1.1 Cells, B1.2 structure and Function of Body Systems, B1.3 Reproduction

Chemistry:

C1.1 Particles, C1.2 Atoms, Elements and Compounds, C1.3 Chemical Reactions, C1.4 Acids & Alkalis

Physics:

P1.2 Sound, P1.3 Light, P1.4 Space, P2.2 Energy

Year 8

Biology:

B2.2 Health & Lifestyle, B2.2 Ecosystems Processes, B2.3 Adaptation & Inheritance

Chemistry:

C2.1 The periodic Table, C2.2 Separating Techniques, C2.3 Metals and Acids, C2.4 The Earth

Physics:

P1.1 Forces, P2.1 Electricity and Magnetism, P2.3 Motion and Pressure

Classes are taught 3 lessons a week, one each of Biology, Chemistry and Physics following the topic order above. The KS3 content is based on the Activate SOW.

In year 7 and 8 there is a Science Challenge week once a term where pupils work collaboratively to solve a Science Problem'. Additionally, weekly current newflash starters are shared with each class once a week.

Key Stage 5

BTEC Applied Science Extended Certificate

Unit 1	Principles & Applications of Science 1
Unit 2	Practical Scientific Techniques
Unit 3	Investigative Skills
Unit 8	Physiology of Human Body Systems

Unit 1 and 2 are taught in year 12. Unit 1 is an examined unit taken at the end of year 12, providing an opportunity for a resit in year 13. Unit 2 is coursework. Unit 3 is taught in year 13 with an external task in January. A resit opportunity is provided in June. Unit 8 is coursework and is optional.



BTEC Applied Science Diploma

In addition to the above units studied for Extended Certificate, the following units are studied:

Unit 4	Laboratory Techniques & Their Application
Unit 5	Principles & Applications of Science 2
Unit 6	Investigative Project
Unit 11	Genes and Genetic Engineering

Unit 5 and 11 are taught in year 12. Unit 5 is an examined unit taken at the end of year 12, providing an opportunity for resit in year 13. Unit 11 is a coursework unit and is the 2nd optional unit. Unit 6 and 4 are both coursework units.