Why Choose GCSE Separate Science?

GCSE Separate Science will develop your understanding of scientific ideas. You will use your detailed knowledge to consider how science is applies and used in the home, industry and in the environment. You will plan and carry out investigations and learn to evaluate your data. You will also use your scientific knowledge to discuss the benefits and drawbacks of scientific and technological developments.

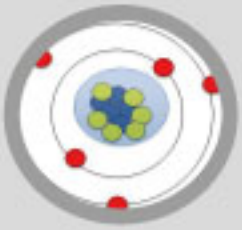
Year 10

Biology (Unit 1)

Cells and movement across membranes
Respiration and the respiratory system in humans
Digestion and the digestive system in humans
Circulatory system in humans
Plants and photosynthesis
Ecosystems, nutrient cycles
and human impact on the environment

Chemistry (Unit 1)

The nature of substances and chemical reactions
Atomic structure and the Periodic Table
Water
The ever-changing Earth
Rate of chemical change
Limestone

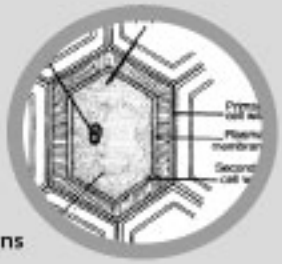


Physics (Unit 1)

Electric circuits
Generating electricity
Making use of energy
Domestic electricity
Features of waves, total internal reflection
of waves and seismic waves
Kinetic theory
Electromagnetism

Year 11

Biology (Unit 2)



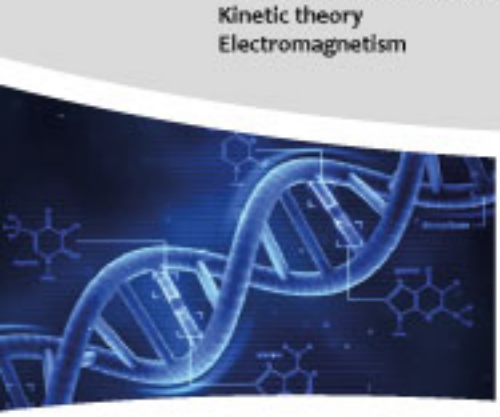
Classification and biodiversity
Cell division and stem cells
DNA and inheritance
Variation and evolution
Response and regulation
Kidneys and homeostasis
Micro-organisms and their applications
Disease, defence and treatment

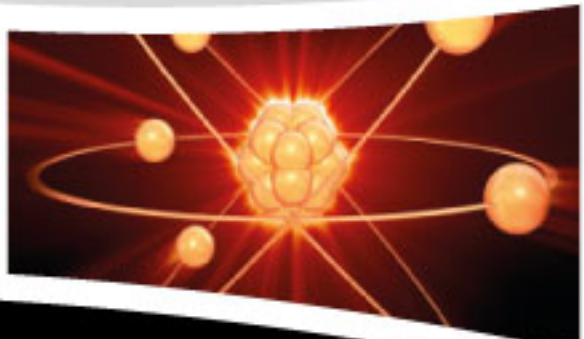
Chemistry (Unit 2)

Bonding, structure and properties
Acids, bases and salts
Metals and their extraction
Chemical reactions and energy
Crude oil, fuels and carbon compounds
Reversible reactions, industrial processes
and important chemicals

Physics (Unit 2)

Distance, speed and acceleration
Newton's laws and further motion concepts
Work and energy
Stars, planets and the Universe
Types of radiation
Half-life, nuclear decay and nuclear energy





At Alun School,
our experienced teaching team provide expert guidance and tuition.

GCSE Separate Science

Assessment Information

Examining Board: WJEC

Accreditation: GCSE Biology GCSE Chemistry GCSE Physics
Grades A*- G (in each subject) Higher Tier: Grades A* - D Foundation Tier: C - G

Year 10: Unit 1 - Biology Unit 1 - Chemistry Unit 1 - Physics
(I hour 45 minutes written examinations for each subject that make up 45% of qualification)

Year 11: Unit 2 - Biology Unit 2 - Chemistry Unit 2 - Physics
(I hour 45 minutes written examinations for each subject that make up 45% of qualification)

Unit 3: Practical Examination: Obtaining Results and **Analysing and Evaluating Results.**
The practical assessment is untiered and will take place Jan/Feb of Year 11. You will be able to demonstrate your experimental and analytical skills through working scientifically.
(10% of qualification)

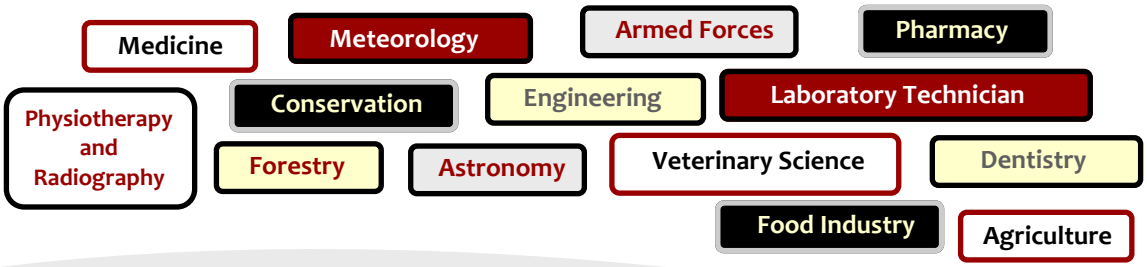
Who is suitable for this course?

To be successful you will be required to be working at a very high level in Science in Year 9. You will also need to be highly motivated, hard-working and enjoy your science lessons.

Why should I take this course?

A knowledge and understanding of science is important for all aspects of everyday life.

GCSE Science is will give you an excellent grounding for opportunities within:



Future Options

After studying GCSE Separate Science you could:
Study Advanced Level Biology, Chemistry or Physics at Sixth Form;
Study for a degree in a science-related course or other subject at university;
Get a job within a field of science.

For Further Information

Please contact the Science department.