

**CORE & ADDITIONAL SCIENCE
and TRIPLE SCIENCE**

**Gwyddoniaeth Craidd & Ychwanegol
a Gwyddoniaeth Triphlyg**

COURSE OUTLINE

The new course is designed to:

- Develop their knowledge and understanding of the material, physical and living worlds.
- Develop their understanding of the nature of science and its applications and the interrelationships between science and society.
- Develop and apply their knowledge and understanding of the scientific process through hypotheses, theories and concepts.
- Develop their awareness of risk and the ability to assess potential risk in the context of potential benefits
- Develop and apply their observational, practical, enquiry and problem-solving skills and understanding in laboratory, field and other learning environments
- Develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions
- Develop their skills in communication, mathematics and the use of technology in scientific contexts.

YR 10 CORE SCIENCE: COURSE CONTENT

Biology: Adaptation, Evolution and Inheritance and Body Maintenance

Chemistry: The Earth and its resources

Physics: Energy, Radiation and the Universe

HOW WILL I BE ASSESSED?

Candidates will sit an external examination paper that is one hour long in each of the three subjects. This course is being delivered using a modular structure. Students will sit three examinations in May/June of Year 10. The coursework will be completed in lessons before March of Year 10. The marks from these four pieces of work will be added together to give each student an actual Science GCSE grade at the end of Year 10.

For further information please contact:
Mr M Skuse - Head of Science

Course Title: Core, Additional Science and Triple Science
Examination Board: WJEC

Qualifications: Core Science - 1 GCSE

Additional Science -1 GCSE

Triple Science - 3 GCSE's

YR11 ADDITIONAL SCIENCE: COURSE CONTENT

Biology: Cells and metabolism, digestion, respiration and biodiversity

Chemistry: Atoms, Bonding and Chemical Change

Physics: Electricity, Forces and Nuclear Physics

HOW WILL IT BE ASSESSED?

Candidates will sit an external examination paper that is one hour long in each of the three subjects. This course is being delivered using a modular structure. Students will sit 1 examination in January of Year 11 and the other 2 in May/June of Year 11. The coursework will be completed in lessons before March of Year 11. The marks from these four pieces of work will be added together to give each student an actual GCSE grade at the end of Year 11 for Additional Science.

This structure means that by the end of Year 11 each student that undertakes these courses will have gained two GCSE grades in Science.

TRIPLE SCIENCE COURSE CONTENT

Biology: Transport in plants and animals, homeostasis, microorganisms and disease

Chemistry: The chemical industry and analysis

Physics: Electromagnetism, Waves, Kinetic Theory and Nucleosynthesis

HOW WILL IT BE ASSESSED?

Candidates will sit an external examination paper that is one hour long in each of the three subjects. The marks from each of the Biology, Chemistry and Physics modules in Year 9, 10 and 11 will be added separately along with three individual pieces of coursework.

This structure means that students studying Triple Science will gain three GCSE grades.

CAREER OPPORTUNITIES AND PROGRESSION

Gaining a qualification in GCSE Science opens up a wide range of exciting opportunities in many varied areas. There is the opportunity to:

- Continue into the sixth form to study AS and A2 science subjects
- Continue into the sixth form to study a wide range of other A level and level 3 qualifications.
- Apply for employment in fields as diverse as engineering, construction, sport science, health and beauty