Year 8 Options 2019

GCSE Science

Examination Board: AQA
Course Specification: 8461, 8462 and 8463

What is Science all about?

GCSE Science builds on the science covered in KS3 to give students a sound foundation in scientific concepts.

KS4 Science Structure:

All students will study Biology, Chemistry and Physics by specialist teachers. During Year 9 and most of Year 10 all students will follow the combined qualification path worth two GCSE grades. However, during the winter term in Year 10, students will be assessed for their suitability to study Triple Award Science. These students will continue on to study the extra content for Triple Science in Year 11 whilst the other students will continue the Combined Science route. Triple Science involves the students achieving a separate GCSE in each of the three sciences whereas Combined Science involves the three science exams being averaged into two grades.

Course Structure:

Science will be taught with 10 hours per fortnight by subject specialists. Students will spend three hours per science per fortnight. The remaining one hour per fortnight is on 'Working Scientifically' which covers practical and mathematical skills common to all three sciences.

The content of the specification will the taught across the three years and can be found here:
https://www.aqa.org.uk/subjects/science/gcse

How will I be assessed?

All formal exams will take place at the end of Year 11. For Triple Science, each GCSE will have two papers, each are 1 hour 45 min in length. Practical skills will be assessed in the external examinations. The new GCSE grading system will be used where students will be awarded a number grade from 9 to 1 for each of the three GCSE Sciences or combined score for Combined Science e.g. 8-8, 8-7, 7-7 etc.
For students selected to do Combined Science, the exam structure is the same with the same topics, but will only be 1 hr 15 min long each.

Exam structure for Science:

- Biology paper 1: Cell Biology; Organisation; Infection and response; and Bioenergetics.
- Biology paper 2: Homeostasis and response; Inheritance, variation and evolution and Ecology.

- Chemistry paper 1: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes and Energy changes.
- Chemistry paper 2: The rate and extent of chemical change; Organic chemistry; Chemical analysis; Chemistry of the atmosphere and using resources

- Physics paper 1: Energy; Electricity; Particle model of matter; Atomic structure
- Physics paper 2: Forces; Waves; Magnetism and electromagnetism

What could I do next with GCSE Triple Science?

The content of the triple award science is largely the same as combined science. It does however go into more detail for each topic, and as a result supports students who are seriously considering A-level sciences in the future.