

GCSE Combined Science – Double Award

What will I learn?

“Somewhere something incredible is waiting to be known” - Carl Sagan.

Science plays such an important role in everything we do. Our course looks at the three disciplines Biology, Chemistry and Physics with a focus on learning through practical investigations. The topics that are covered within our course are as follows:

Biology

- Cells and Organisation
- Disease and Bioenergetics
- Biological response
- Genetics and Reproduction
- Ecology

Chemistry

- Atoms, Bonding and Moles
- Chemical reactions and Energy Changes
- Rates, Equilibrium and Organic Chemistry
- Analysis and the Earth's Resources

Physics

- Energy and Energy resources
- Particles at work
- Forces in action
- Waves and Electromagnetism

The course we follow will give students an all-round knowledge of Science which will allow them to apply for courses that are STEM related Post-16. Our new course also gives students knowledge they will use in their everyday lives by looking at diseases, cancer, how lifestyle choices have an effect on health and the environment. As well as more practical knowledge of how circuits work, how to wire a plug and the dangers that UV radiation and microwave radiation from mobile phones can cause.

There may be the option of selected students studying the additional modules for Triple Science and this will be decided in Year 10.

What do I need to know before I can start the course?

The course is designed for students of all abilities with prior knowledge from KS3 being built upon and extended throughout the course.

What does the course involve?

The course no longer has a coursework element as this has been replaced by 16 required practical experiments that will be examined within the students end of year exams. Assessment for the course is solely exam based with the students taking 6 exams at the end of year 11. These exams will be 1hour and 15mins each with 2 exams in each science discipline. Each paper is worth 70 marks and will make up 16.7% of the final grade. Each student will achieve 2 GCSEs in Science from this course.

What can I do after the course? What careers will this course be useful for?

Our course will allow you to study A-Level Biology, Chemistry and Physics. They will also be required for BTEC Vocational courses in Science based subjects for example Sport, Animal Care and Engineering. Science studied at Post-16 will enable you to pursue a career in medicine, teaching, engineering, forensics to name a few. Please check the websites below for a full list of career options.

Who can I talk to for more information?

For more information speak to any of the Science teachers within the department.

What websites can I check out?

<http://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464>

<http://www.sciencebuddies.org/science-engineering-careers>

<http://www.wherestemcantakeyou.co.uk/>