

What will I learn on this course?

This double GCSE contains elements of Biology, Physics and Chemistry. Students on this course have 5 hours per week of science. The course content is studied over two years, but all external exams are sat at the end of year 11. There is no internal assessment or coursework, but students are expected to complete a series of required practical experiments, the understanding of which is assessed in the final exams. This course allows progression to A level science courses and is offered to all students at BOA as part of their core studies.

How is the course structured and assessed?

Biology

1. Cell biology
2. Organisation
3. Infection and response
4. Bioenergetics
5. Homeostasis and response
6. Inheritance, variation, and evolution
7. Ecology

Chemistry

1. Atomic structure and the periodic table
2. Bonding, structure, and the properties of matter
3. Quantitative chemistry
4. Chemical changes
5. Energy changes
6. The rate and extent of chemical change
7. Organic chemistry
8. Chemical analysis
9. Chemistry of the atmosphere
10. Using resources

Physics

1. Energy
2. Electricity
3. Particle model of matter
4. Atomic structure
5. Forces
6. Waves
7. Magnetism and electromagnetism

Each science (Biology, Chemistry and Physics) each are examined in two, 75-minute exams, at the end of the course, giving six total external exams. The possible topics in each exam are known in advance (for example Physics paper 2 always includes Forces, Waves and Electromagnetism). These exams include assessment of the key scientific knowledge, the analysis of data and the understanding of experimental methods. At the end of the course students are awarded two 9—1 grades (for example a 65) which are based on the total marks scored over all six papers.

How will I study?

Combined Science Students will study science for 5 hours each week. These lessons will include practical experimental work in our well-equipped labs wherever possible as well as lessons on the theory and history of scientific ideas and concepts.