# Biology A Level

**Examination Board: Edexcel B (MWS & OSA) or OCR A (BHG,**

**RA & STA)**
**Who should take the course?**

This course builds on the Programme of Study for GCSE Separate Science or Combined Science.

Many students are required to study A Level Biology in order to qualify for higher level study in the environmental sciences, biochemistry, biomedical sciences, medicine, dentistry, pharmacy and veterinary sciences.

Biology is also an excellent preparation for a wide range of other careers since the successful study of Biology develops the key employment skills of presentation, development of mathematical concepts and applications, analysing data, problem solving, and communication. A Level Biology is a good course to study alongside chemistry, geography, mathematics, physics, psychology or PE. It is usually best to take Biology in combination with at least one of these subjects.

**What is the course about?**

During the two year linear course the following areas of Biology will be studied:

- Biological molecules: carbohydrates, lipids, proteins, DNA, enzymes and water
- Cells, viruses and reproduction of living things: eukaryotic and prokaryotic cells, viruses, cell division, sexual reproduction
- Classification and biodiversity
- Exchange and transport: gas exchange, mammalian circulation, transport in plants
- Energy for biological processes: respiration, photosynthesis
- Microbiology and pathogens
- Gene technology
- Genetics
- Control systems: chemical control in animals and plants, osmoregulation, structure and function of mammalian nervous system
- Ecosystems

**How is it assessed?**

This A Level is a two year linear course which will culminate in three exams at the end of year 13. For Edexcel, two of these exams focus on the content and mathematical skills of the course and the third paper focuses on synoptic skills and the experimental skills that have been taught throughout the two years. For OCR the experimental skills are tested in all 3 papers. The questions in these exams include multiple choice answers, short answer questions, longer answer questions, mathematical calculations and extended writing tasks. There is no practical assessment in the course, however there will be a standard set of practical skills that will be assessed in the final exams at the end of the course.

Students will be awarded a separate Science Practical Endorsement alongside their A Level Biology grade. This will be a teacher assessed Endorsement based on the students competency against Practical Assessment criteria. Students will be assessed as either pass or not reported. The Endorsement will not contribute to the overall grade for their A Level Biology qualification, but the result will be recorded on the student’s certificate.