



The Cardinal Wiseman School
A Level courses 2020-2022

Biology

“Biology is the study of complicated things that give the appearance of having been designed for a purpose” – Richard Dawkins

Entry Requirements

- 6 x Level 9 to 4 GCSE passes including a 4 in English Language
- GCSE Mathematics - Grade 6
- GCSE Separate Biology 6 in Biology GCSE 6-6 in Combined Science.

Biology is the study of the living world. It provides the opportunity to learn and understand areas such as neurology, genetic engineering, DNA fingerprinting and advances in the medical world which are making a real impact on our lives. If you are a talented and passionate biologist who wishes to study biological concepts in greater complexity and you wish to pursue the sciences at higher education, then A Level Biology is the subject for you.

What will I study?

Student will study from the AQA Biology Specification that features units which include the following:

A Level

You will study four sections in Year 12: 1. Biological molecules, 2. Cells, 3. Organisms exchanging substances with their environment and 4. Genetic Information variation and relationships between organisms.

You will study four more sections in Year 13: 5. Energy transfer in and between organisms, 6. Organisms response to changes in their environment, 7. Genetics, Population, Evolution and Ecosystems, and 8. The control of gene Expression

At the end of year 13 for the A Level qualification, students will take three exams that will draw on content from every topic over the two-year period.

Students will also receive a practical competency endorsement from the Edexcel exam board.

Why study Biology?

A Level Biology is a good all round academic subject. It will enable you to develop a set of skills which is sought after by both universities and employers. The skills you will develop are:

- Problem-solving and efficient communication
- Essay writing
- Data handling, including information retrieval, the use of numeracy and ICT.
- A range of practical skills that require creativity and accuracy
- How to work effectively as part of a group
- How to present conclusions
- Critically analysing and evaluating the methodology, results and impact of your own and others activities.

What can I do with an A Level in Biology?

Biology is an essential qualification for a large amount of careers as well as well as being an excellent subject to study alongside any other A Level.

A large number of students have moved onto areas such as Medicine, Biomedical Sciences, Biomedical Engineering, Dentistry, Pharmacy, and Environmental science.

Not all of our past students have gone onto a career in science or a science based subject. Some have ended up studying Business, Law, Mathematics as well as Architecture.

“What is truly revolutionary about molecular biology in the post-Watson-Crick era is that it has become digital.....the machine code of the genes is uncannily computer-like”

Richard Dawkins