



A Level - Biology

In this subject you will be encouraged to:

- Develop an interest in, an enthusiasm for biology, including developing an interest in further study and careers in biology.
- Appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.
- Develop essential knowledge and understanding of different areas of biology and how they relate to each other.

This course is divided into topics, each covering different key concepts in biology. Applications of biology are covered throughout the A level course. You will also have the opportunity to use ICT to reinforce your learning and understanding.

Assessment Overview

Content is split into 6 teaching modules.

Module 1 - Development of practical skills in biology - 37%

Biological processes (01) 100 marks 2 hour 15 minutes written paper
Assesses content from modules 1, 2, 3 and 5.

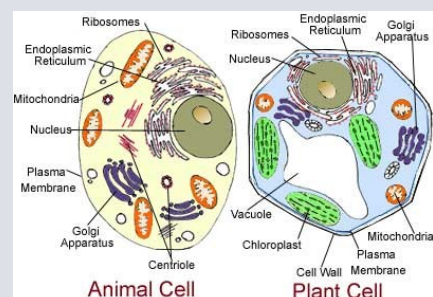
Module 2 - Foundations in biology - 37%

Biological diversity (02) 100 marks 2 hour 15 minutes written paper
Assesses content from modules 1, 2, 4 and 6.

Module 3 - Exchange and transport - 26%

Unified biology (03) 70 marks 1 hour 30 minutes written paper
Assesses content from all modules (1-6).

Module 4 - Biodiversity, evolution and disease, Module 5 - Communication, homeostasis and energy, Module 6 -



Head of Department

Mrs Raza

araza@cardinalnewmanschool.net

ENTRY REQUIREMENTS

You need to have achieved at least a 6-6 in GCSE Science or a 6 in GCSE Biology. You also require a 6 in GCSE Mathematics, a 4 in GCSE English and overall 5 GCSEs of 5 or above.

When considering A level biology it is important to realise that a minimum of 10% of the final exams are based on mathematical skills so a sound knowledge of GCSE mathematics is essential.

You also have to be able to write in a logical, coherent and concise manner for the practical aspect of the course which accounts for a minimum of 15% of the final exam mark.





A Level - Biology

What will I study?

Module 1 - Development of practical skills in biology

- 1.1 Practical skills assessed in a written examination
- 1.2 Practical skills assessed in the practical endorsement

Module 2 - Foundations in biology

- 2.1.1 Cell structure
- 2.1.2 Biological molecules
- 2.1.3 Nucleotides and nucleic acids
- 2.1.4 Enzymes
- 2.1.5 Biological membranes
- 2.1.6 Cell division, cell diversity and cellular organisation

Module 3 - Exchange and transport

- 3.1.1 Exchange surfaces
- 3.1.2 Transport in animals
- 3.1.3 Transport in plants

Module 4 - Biodiversity, evolution and disease

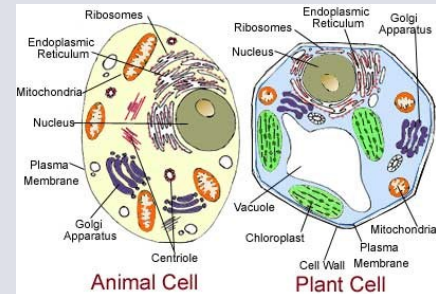
- 4.1.1 Communicable diseases, disease prevention and the immune system
- 4.2.1 Biodiversity
- 4.2.2 Classification and evolution

Module 5 - Communication, homeostasis and energy

- 5.1.1 Communication and homeostasis
- 5.1.2 Excretion as an example of homeostatic control
- 5.1.3 Neuronal communication
- 5.1.4 Hormonal communication
- 5.1.5 Plant and animal responses
- 5.2.1 Photosynthesis
- 5.2.2 Respiration

Module 6 - Genetics, evolution and ecosystems

- 6.1.1 Cellular control
- 6.1.2 Patterns of inheritance
- 6.1.3 Manipulating genomes
- 6.2.1 Cloning and biotechnology



POSSIBLE CAREER OPTIONS

Having A level biology is very impressive in a variety of ways, offering you access to a huge range of options for both further education and careers, including:

- Food scientist
- Biomedical sciences,
- Physician
- Dentistry
- Nursing
- Ophthalmology
- Agricultural engineer
- Veterinary medicine
- Pharmacology
- Physical therapist
- Physiologist

