# OCR AS & A LEVEL BIOLOGY (A)

A Level Biology is an exciting and engaging course that will open up the mysteries behind life as we know it. During the course you will be challenged in both academic and practical environments, allowing you to develop your knowledge of biological research methods, human anatomy and the living world. Your skill set will also develop, giving you a deeper understanding of problem solving techniques, essay writing, targeted investigations and communicating complex ideas.



#### Year 12

Module 1: Development of Practical Skills in Biology.

# Module 2: Foundations in Biology.

Cell Structure; Biological Molecules; Nucleotides and Nucleic Acids; Enzymes; Biological Membranes; Cell Division, Cell Diversity And Cellular Organisation.

### Module 3: Exchange and Transport.

Exchange Surfaces; Transport in Animals; Transport in Plants.

Module 4: Biodiversity, Evolution and Disease. Communicable Diseases, Disease Prevention and the Immune System; Biodiversity; Classification and Evolution.

#### Year 13

In addition to the modules studied as part of Year 12, the following modules are studied in Year 13:

# Module 5: Communication, Homeostasis and Energy.

Communication and Homeostasis; Excretion as an example of Homeostatic Control; Neuronal Communication; Hormonal Communication; Plant and Animal Responses; Photosynthesis; Respiration.

Module 6: Genetics, Evolution and Ecosystems. Cellular Control; Patterns of Inheritance; Manipulating Genomes; Cloning and Biotechnology; Ecosystems; Populations and Sustainability.

# **ASSESSMENT**

#### Year 12 examinations:

- Breadth in Biology: 70 marks, 1 hour 30 minutes written paper (50% of AS Level).
- Depth in Biology: 70 marks, 1 hour 30 minutes written paper (50% of AS Level).

Practical endorsement - a non exam assessment which does not contribute to the final grade.

#### Year 13 examinations:

- **Biological Processes (01)**: 100 marks, 2 hours 15 minutes written paper (37% of A Level) assesses modules 1, 2, 3 and 5.
- Biological Diversity (02): 100 marks, 2 hours 15 minutes written paper (37% of A Level) - assesses modules 1, 2, 4 and 6.
- Unified Biology (03): 70 marks, 1 hour 30 minutes written paper (26% of A Level) - assesses modules 1 to 6.

# SUBJECT COMBINATIONS

A Level Biology matches well with A Levels in all the other Sciences, Mathematics, Psychology, Sociology and BTEC Health & Social Care.

## **COURSE CONTACT**

Sam Hedley

hedley.s@trinity.npcat.org.uk

**Michelle Dixon** dixon.m@trinity.npcat.org.uk







At least 5 GCSEs at grade 5 and above including English & Maths. Grade 5 in Maths is important as 10% of A Level Biology is maths based content.

Students should also have gained a minimum of two grade 5s at higher tier in GCSE Science. It is anticipated that students will have studied Biology as a Separate Science subject or followed the Combined Science route.

# **PROGRESSION**

A Level Biology provides an excellent foundation for further study into Medicine and all of the options within that sector, Healthcare and any linked Science. You will also have the option to go straight into the workplace and apprenticeships which are now more common than ever

# **FUTURES**

An A Level in Biology gives you the knowledge you need to prepare for a future career in the medical field, whether you want to work in Medicine, Midwifery, Pharmaceuticals, or Veterinary Science. Other career options outside of Medicine include Healthcare, Civil Service and Engineering.



