

**Biology**

**A Level 2024 -2026**

**Wigston College**

**Examination Board**

OCR A

**Entry Requirements**

GCSE Grade 6, 6 in Combined Science or a 6 in GCSE Biology and a minimum Grade 5 in GCSE Maths is also necessary

**What will I be studying?**

**Year 12 is divided into four modules.**

**Module 1:** Development of practical skills in Biology (Year 12 and 13)

Practical skills are embedded throughout all the content of this specification. Learners will be required to develop a range of practical skills throughout their course in preparation for the written examinations.

**Module 2:** Foundations in Biology

This module gives learners the opportunity to use microscopy to study the cell structure of a variety of organisms.

**Module 3**: Exchange and Transport

In this module, learners study the structure and function of gas exchange and transport systems in a range of animals and in terrestrial plants.

**Module 4**: Biodiversity, Evolution and Disease  
In this module the learners study the biodiversity of organisms. It serves as an introduction to ecology, emphasising practical techniques and an appreciation of the need to maintain biodiversity.

**Two further modules will be completed in Year 13.**   
  
**Module 5**: Communication, Homeostasis and Energy  
It is important that organisms, both plants and animals are able to respond to stimuli. This is achieved by communication within the body, which may be chemical and/or electrical.

**Module 6**: Genetics, Evolution and Ecosystems

This module covers the role of genes in regulating and controlling cell function and development. Heredity and the mechanisms of evolution and speciation are also covered.

**How will I be studying?**

Lessons will be a mix of practical work (at least 12 ’PAG’ tasks have to be completed over the duration of the course) and standard theoretical teaching. There are opportunities for research and group work also.

**How will I be assessed?**

Paper 1: 2hr 15 mins written paper (Biological Processes) Paper 2: 2hr 15 mins written paper (Biological Diversity) Paper 3: 1hr 30 mins(Unified Biology) Practical Endorsement for Biology

**Core Mathematics:**

As this subject contains elements of mathematical content within its specification and assessments, we strongly advise that you should also elect to take the Core Mathematics course to support your studies (if not already taking A Level Mathematics). The Core Mathematics course is a one-year course specifically designed for this purpose. You would still need to pick three main Level 3 subjects plus Core Mathematics.  Please see the Core Mathematics information sheet for more details.

**Where Next?**

Progression onto University degree in Biological related subjects and careers including:

[Biotechnologist](https://www.prospects.ac.uk/job-profiles/biotechnologist)

[Higher education lecturer](https://www.prospects.ac.uk/job-profiles/higher-education-lecturer)

[Marine biologist](https://www.prospects.ac.uk/job-profiles/marine-biologist)

[Microbiologist](https://www.prospects.ac.uk/job-profiles/microbiologist)

[Nanotechnologist](https://www.prospects.ac.uk/job-profiles/nanotechnologist)

[Nature conservation Officer](https://www.prospects.ac.uk/job-profiles/nature-conservation-officer)

[Pharmacologist](https://www.prospects.ac.uk/job-profiles/pharmacologist)

[Research scientist (life sciences)](https://www.prospects.ac.uk/job-profiles/research-scientist-life-sciences)

[Scientific laboratory Technician](https://www.prospects.ac.uk/job-profiles/scientific-laboratory-technician)

[Secondary school Teacher](https://www.prospects.ac.uk/job-profiles/secondary-school-teacher)

[Soil scientist](https://www.prospects.ac.uk/job-profiles/soil-scientist)

[Teaching laboratory technician](https://www.prospects.ac.uk/job-profiles/teaching-laboratory-technician)

[Animal physiotherapist](https://www.prospects.ac.uk/job-profiles/animal-physiotherapist)

[Dental hygienist](https://www.prospects.ac.uk/job-profiles/dental-hygienist)

[Dentist](https://www.prospects.ac.uk/job-profiles/dentist)

[General Practice Doctor](https://www.prospects.ac.uk/job-profiles/general-practice-doctor)

[Health promotion specialist](https://www.prospects.ac.uk/job-profiles/health-promotion-specialist)

[Healthcare scientist](https://www.prospects.ac.uk/job-profiles/healthcare-scientist-cardiac-sciences)

[Cardiac sciences](https://www.prospects.ac.uk/job-profiles/healthcare-scientist-cardiac-sciences)

[Physician associate](https://www.prospects.ac.uk/job-profiles/physician-associate),

[Science writer](https://www.prospects.ac.uk/job-profiles/science-writer)

[Sustainability consultant](https://www.prospects.ac.uk/job-profiles/sustainability-consultant)

[Veterinary nurse](https://www.prospects.ac.uk/job-profiles/veterinary-nurse)

[Zoologist](https://www.prospects.ac.uk/job-profiles/zoologist)

Pathology

Forensics.