



Wigston College

Biology A Level



Examination Board

AQA

Entry Requirements

GCSE Grade 6-6 in Combined Science (grade 7-7 if Chemistry or Physics is also being taken) or a 6 in GCSE Biology and a minimum Grade 5 in GCSE Maths is also necessary

What will I be studying?

AS and first year of A-level

1. Biological molecules
2. Cells
3. Organisms exchange substances with their environment
4. Genetic information, variation and relationships between organisms

Second year of A-level

5. Energy transfers in and between organisms
6. Organisms respond to changes in their internal and external environments
7. Genetics, populations, evolution and ecosystems
8. The control of gene expression

How will I be studying?

Biology, like all sciences, is a practical subject. Throughout the course you will carry out practical activities including:

- using microscopes to see cell division
- dissection of animal or plant systems
- aseptic technique to study microbial growth
- investigating activity within cells
- investigating animal behaviours
- investigating distributions of species in the environment.

These practicals will give you the skills and confidence needed to investigate the way living things behave and work. It will also ensure that if you choose to study a Biology-based subject at university, you'll have the practical skills needed to carry out successful experiments in your degree.

How will I be assessed?

There is no coursework on this course. However, your performance during practicals will be assessed. There are three exams at the end of the two years for A-level, all of which are two hours long. At least 15% of the marks for A-level Biology are based on what you learned in your practicals.

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
Higher education lecturer
Marine biologist
Microbiologist
Nanotechnologist
Nature conservation Officer
Pharmacologist
Research scientist (life sciences)
Scientific laboratory Technician
Secondary school Teacher
Soil scientist
Teaching laboratory technician
Animal physiotherapist
Dental hygienist
Dentist
General Practice Doctor
Health promotion specialist
Healthcare scientist
Cardiac sciences
Physician associate,
Science writer
Sustainability consultant
Veterinary nurse
Zoologist
Pathology
Forensics

"Biology is bigger than physics. It enjoys bigger budgets, a bigger workforce, and achieves more major discoveries. Biology is likely to remain the biggest part of science through the twenty-first century."

Freeman Dyson, theoretical physicist and mathematician

