Guilsborough Academy Sixth Form
KS5 Curriculum



A Level
Biology

Course Title:
Biology

Entry Requirements:
2 Grade 6s in GCSE Science. For triple Science one must be Biology.
Grade 6 in GCSE Maths.

Examination Board
OCRA

Assessment:

- Paper 1 Biological processes 2 hr 15 mins exam worth 37%
- Paper 2 Biological diversity 2 hr 15 mins exam worth 37%
- Paper 3 Unified biology 1 hr 30 mins exam worth 26%
- Non-exam assessment - Practical endorsement for biology - Pass/Fail

Is this course right for me?

Biology is a complex and broad science. You will enjoy this course if you are interested in all aspects of living organisms, how they work and how they interact with their environment. You will develop a logical approach to problem solving combined with practical applications in experiments and fieldwork. The course builds on the GCSE modules and you will be required to demonstrate your knowledge and understanding of a wide range of topics, in addition to developing your skills in application evaluation and analysis.

Studying Biology at A Level will require you to be organised, diligent and hardworking, as there is a great deal of content that needs to be learned and understood. The approach and learning, explained in this course, will enable you to see the bigger picture and link different areas of Biology to each other.

A LEVEL BIOLOGY

Unit Contents:

Module 1–Developmentof practical skills in biology
Skills of planning, implementing, analysis and evaluation

Module 2 – Foundations in biology
Includes: Cell structure; Biological molecules; Nucleotides and nucleic acids; Enzymes; Biological membranes; Cell division, cell diversity and cellular organisation

Module 3 – Exchange and transport
Includes: Exchange surfaces; Transport in animals; Transport in plants.

Module 4 – Biodiversity, evolution and disease Includes: Communicable diseases, disease prevention and the immune system; Biodiversity; Classification and evolution

Module 5 – Communications, homeostasis and energy
Includes: 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
Includes: Cellular control; Patterns of inheritance; Manipulating genomes; Cloning and biotechnology; Ecosystems; Populations and sustainability.





Progression:

This course is suitable for students wishing to read for Biology, Biological Science and Biomedical Science Degrees, as well as Biochemistry, Pharmacology and Pharmacy Degrees. Careers include Medicine, Veterinary Science, Dentistry, Research Scientist, Biomedical Scientist, Clinical Scientist and within the education sector.

Examples of university courses and grades required:

- MBChB Medicine at Edinburgh University–requires Grade A in A-Level Biology
- Biomedical Science at the University of Sheffield – requires Grades A,A,B (which must include biology).
- Biological Science at the University of Bedfordshire – requires 80 UCAS tariff points, an A-Level Science is preferred.
- Biology with Ecology at University of Hull - requires a grade C in Biology.

Further Information Contact:
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