BIOLOGY A Level

COURSE CONTENT

AS and first year of A-level

1. Biological molecules

2. Cells

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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

Practical Requirements

Throughout the course, students will complete 12 required practical activities including the following;

- 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 provide the skills and confidence needed to investigate the way living things behave and work. It will also ensure that if students choose to study a Biology-based subject at university, they will have the practical skills needed to carry out successful experiments in their degree.

ASSESSMENT CRITERIA

3 examinations at the end of second year

EXTRA-CURRICULAR OR ENRICHMENT OPPORTUNITIES

Fieldwork/ trips, university visits to microbiology laboratories and biology research trips, conferences on careers using biology.

FUTURE OPPORTUNITIES

Studying A-level biology is required for many career pathways including; Medicine, Clinical molecular geneticist, Pharmacologist, Research scientist, Vet, Marine biologist and Dentistry. It is a highly regarded A-level subject and is suitable for any student who has a keen interest in the careers above and enjoys combining both theory and practical skills.

PRIOR KNOWLEDGE

Essential: GCSE Science and GCSE Maths

