

# **BIOLOGY**

**QUALIFICATION:** A Level

**EXAM BOARD:** AQA

COURSE LEADER: Mrs Gaish

"Biology motivates me and engages my interest with fascinating topics explored with the breadth and depth fully explained by professional teachers".



# BOSTON HIGH SCHOOL SIXTH FORM

A mixed Sixth Form in a selective Grammar school for girls

### **COURSE CONTENT**

Biology is a fascinating subject, the study of which will see you learn about the natural world and all the living things within it. Gaining an A-level in Biology opens a vast range of opportunities for both university degrees and career options, many of which could take you all around the world.

Specific course content:

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

Alongside in-depth knowledge of the biological world, biologists also develop skills and understanding of scientific methods, data analysis, observation, correlations and causal relationships. These develop essential practical skills, using a range of apparatus and techniques, for doing a Science-based degree.

As with the other sciences, the study of Biology also helps students to build up skills in research, problem solving, organisation and analytical skills. Given the group project work that occurs throughout the course, students also develop good teamwork and communication skills.

#### PREPARATION FOR STUDYING THIS SUBJECT

Read the AS AQA Biology specification by clicking here

#### **ASSESSMENT**

All exams are 2 hours. Paper 1 and 2 have two sections: short answer questions and a 15-mark comprehension question.

Paper 1: Any content from topics 1-4, including relevant practical skills. (35% of A level and 91 marks)

Paper 2: Any content from topics 5–8, including relevant practical skills. (35% of A level and 91 marks)

**Paper 3:** Synoptic paper where any content from topics 1–8, including relevant practical skills (30% of A level and 78 marks). This paper has 3 sections:

- 1. Structured questions including practical techniques
- 2. Critical analysis of given experimental data
- 3. One essay from a choice of 2 titles.

Practical endorsement in Biology is awarded separately depending on completion of a minimum of 12 required practical activities.

# **FUTURE OPPORTUNITIES**

Studying: Biology, Medicine, Veterinary Medicine, Pharmacology, Biochemistry, Biological Sciences, Environmental Science, Psychology, Ecology, Conservation, Environmental Sciences, Agriculture, Animal Science, Natural History.

Careers directly related to Biology include medical professions, pharmacy, physiotherapy, biomedical engineering, research science (life sciences), microbiology, marine biology, conservation, and ecology, environmental management, food science, agricultural engineering and zoology.

The transferable skills developed would also be useful in a diverse range of careers including law, business analysis, psychology (Biology is a requirement for some Psychology degrees).

## **ENTRY REQUIREMENTS**

Full entry requirements can be found on our website. Please ensure you check these as some courses have subject specific requirements that must be met in addition to the general entry requirements to join our Sixth Form.