



A Level

Biology

We follow both the OCR and the AQA Biology A Syllabus in the Brigg Sixth Form. The A-Level is a 2-year linear course.

What Entry Requirements Do I Need?

Students ideally should have achieved a level 6 or above at GCSE in either Combined Science or Biology. In addition, students should have achieved a minimum of level 4 and preferably a level 5 in Maths.

How Will I Be Assessed?

At the end of the two-year AQA course, students take 3 exams papers:

Paper 1

Module 1: Biological molecules

Module 2: Cells

Module 3: Organisms exchange substances with their environment

Module 4: Genetic info, variation & relationships between organisms.

It is worth 91 marks, lasts for 2 hours and contributes 35% of the final A Level grade.

Paper 2

Module 5: Energy transfers in and between organisms

Module 6: Organisms respond to changes in their internal and external environments.

Module 7: Genetics, populations, evolution & ecosystems

Module 8: The control of gene expression.

It is also worth 91 marks, lasts for 2 hours and contributes 35% of the final A Level grade.

Paper 3 is a "synoptic" paper and covers content from the entire specification.

It is worth 78 marks, lasts for 2 hours and contributes 30% of A Level.

At the end of the two-year OCR course, students take 3 exams papers:

Paper 1: Biological Processes (100 marks, 2hr 15min, 37% of total Tests, Modules 1,2,3,5):

Module 1: Development of practical skills in biology,

Module 2: Foundations in biology

Module 3: Exchange and transport, **Module 5:**

Communication, homeostasis & energy.

Paper 2: Biological Diversity (100 marks, 2hr 15min, 37% of total Tests, Modules 1,2,4,6):

Module 4: Biodiversity, evolution and disease

Module 6: Genetics, evolution & ecosystems.

Paper 3: Unified Biology (70 marks, 1hr 30min, 26% of total tests): A synoptic paper covering content from the entire specification.

Assessment of Practical Skills

Students will do a minimum of 12 experiments ("required practicals") across their A Level course. Questions in exam papers will test students' knowledge and understanding of their practical work. Students will be awarded an A Level grade based on their exams, and a 'pass' or 'fail' for practical work (Practical Endorsement) in lessons. This system of assessment replaces the current assessment system of practical exams (ISAs). Students will be required to maintain a Laboratory Log Book for examination by the exam board upon request or visitation by their inspector.

Why study Biology?

The study of biology connects us to the world we are living in and reminds us of our interconnectedness with all other life forms. It develops awareness of the significance of the Earth's fauna and flora and distinctive ecosystems. It provides opportunities to learn about the processes of all living things and what we learn is directly relevant to our species and environment. In addition, by studying biology, we learn to make more informed decisions about our own health and about significant biological issues such as genetically modified crops, the use of antibiotics, and the eradication of invasive species.

Biologists are also at the cutting edge of ecological conservation research. By studying biology, we become much more aware of ecological issues, and better able to debate situations where exploitation of the environment (for example, for farming, mining, or energy production purposes) clashes with conservation objectives, or where we need to develop more sustainable ways of using our natural resources.

What Kind of Person Studies This Course and where will it lead me?

There are many reasons for taking Biology, including:

- You wish to follow a career in a biology-related area such as Medicine, Ecology or Forensic Science.
- You feel that a further qualification in Biology would assist you in other related areas of study such as Chemistry, Geography or PE.
- You enjoy the subject, even if you do not wish to pursue a Science related career.

A level Biology provides a solid grounding in analytical thinking, writing reports and clear communication – all of which are useful life skills. You will undertake lab and field experiments which underpin the theoretical study; they also hone your teamwork and practical abilities.

This A Level qualification is an ideal foundation for a Biology/Science related career, for example in Medicine, Veterinary Science, Ecology and Forensic Science. In combination with other A-Level qualifications it will provide a suitable entry qualification for a degree course in a biological field or related scientific disciplines.

