

Biology

Qualification	AS/A level
Awarding Body	WJEC
Entry Requirements	<u>B</u> grade or higher in <u>GCSE Biology</u> / <u>AB</u> or higher in <u>Double award Science GCSE</u>

Course Overview

Biology A level provides a wide breadth of knowledge which touches on many varied aspects of a range of topics, including the internal workings of organisms in physiology and the interdependence of living things in ecology, to social issues including human influence on the environment and the ethical considerations of genetics. The study of biology encourages an appreciation of these issues and their implications as well as providing an insight into the living world. It is intended that the use of a variety of approaches will stimulate interest, promote understanding and engender an overall appreciation and sense of wonder at the living world. Practical work is an intrinsic part of biology, and is greatly valued by higher education. The WJEC specification for Biology aims to encourage learners to:

1. develop essential knowledge and understanding of different areas of biology and how they relate to each other
2. develop and demonstrate a deep appreciation of the skills, knowledge and understanding of scientific methods used within biology.
3. develop competence and confidence in a variety of practical, mathematical and problem solving skills.
4. develop their interest in and enthusiasm for biology, including developing an interest in further study and careers associated with the subject
5. understand how society makes decisions about biological issues and how biology contributes to the success of the economy and society.

How this course will be assessed (weightings are in relation to the full A level)

The specification is divided into a total of 5 units, 2 AS units and 3 A2 units.

Advanced Subsidiary

AS Unit 1 Basic Biochemistry and Cell Organisation Written examination: 1 hour 30 minutes (80 marks) 20% of qualification

AS Unit 2 Biodiversity and Physiology of Body Systems Written examination: 1 hour 30 minutes (80 marks) 20% of qualification

A Level (the above plus a further 3 units)

A2 Unit 3 Energy, Homeostasis and the Environment Written examination: 2 hours (90 marks) 25% of qualification

A2 Unit 4 Variation, Inheritance and Options Written examination: 2 hours (90 marks) 25% of qualification

A2 Unit 5 Practical examination (50 marks) 10% of qualification

What Next?

Biology is a key subject for lots of STEM careers, particularly in healthcare, medicine and jobs involving plants or animals. The list is pretty long and includes: nursing, dentistry, forensic science, psychology, physiotherapy, botany, environmental science, zoology, geology, oceanography, pharmaceuticals, energy, teaching, science writing, genetics and research. It is also important to remember that Biology is excellent preparation for non-scientific careers, thanks to the skills it provides – everything from analytical thinking to writing reports.

Additional Information

Biology will support your study of other sciences and Maths as well as subjects like Psychology and Geography. But study it with a language or an essay subject like English at A-level and you might have even more choices for your career.