

Biology

COURSE CODE

AS Level	601/4624/2	7401
A Level	601/42625/4	7402

ENTRY REQUIREMENTS

- 6 or above in GCSE Biology (Treble Science) or a 6 or above in the Biology exams in GCSE Combined Science.
- 6 or above in GCSE Combined Science or an average of a 6 or above in Treble Science (i.e. an average of 6 or above in Biology, Chemistry and Physics GCSEs).
- 6 or above in GCSE Maths.

WHAT WILL YOU LEARN?

The AS course is divided into four main areas:

- 3.1 Biological Molecules - monomers, polymers, carbohydrates, lipids, proteins, enzymes, DNA, RNA, ATP and water.
- 3.2 Cells - eukaryotic, prokaryotic, microscopy, cell cycle, cell division, transport across membranes, cell recognition and immune system.
- 3.3 Organisms exchange substances with their environment - SA: Volume, gas exchange, digestion and absorption and mass transport.
- 3.4 Genetic information, variation and relationships between organisms - DNA genes and chromosomes, protein synthesis, genetic diversity, taxonomy, species diversity.

The A2 course is divided into four main areas:

- 3.5 Energy transfers in and between organisms - photosynthesis, respiration, energy and ecosystems and nutrient cycles.
- 3.6 Organisms respond to changes in their internal and external environment - survival and response, receptors, control of heart.
- 3.7 Genetics, populations, evolution and ecosystems - inheritance of characteristics, populations, evolution, speciation, studying populations in ecosystems.
- 3.8 The control of gene expression - DNA and proteins, gene expression, genome projects, gene technologies.

ASSESSMENT

AS Level

- Paper 1 - 1 hr 30 mins 75 marks, 50% of AS mark and covers any section of AS course.
- Paper 2 - 1 hr 30 mins 75 marks, 50% of AS mark and covers any section of AS course.

A Level

- Paper 1 - 2 hours, 35% of A2 mark and covers AS topics 1-4.
- Paper 2 - 2 hours, 35% of A2 mark and covers A2 topics 5-8.
- Paper 3 - 2 hours, 30% of A2 mark and covers all AS topics and A2 topics 1-8.

NEXT STEPS

Degrees in Biological Sciences, Medicine, Veterinary Sciences, Biochemistry, Physiotherapy, Sport and Exercise Science, Physiology, Natural Sciences and many more.

CAREER INFORMATION

Biology is an excellent choice of subject for people who want a career in health and clinical professions, such as medicine, dentistry, veterinary science, physiotherapy, sport science, pharmacy, optometry, nursing, zoology, botany, marine biology or forensic science.

EXTRA COSTS

£400 (approximately) for field course in the summer term of Year 12. Approximately £40 for textbook, revision guide, exam practice workbook, maths skills guide and Biological Sciences Review Subscription.