

Subject: Biology

Exam Board: Edexcel

Course Number: 9BIO

Course Overview: Biology A-level is designed to extend your understanding of the structure and function of living things and develop your ability to apply your understanding to explaining real-life and practical contexts. Practical work, mathematical skills and applying your knowledge to explain data forms an integral part of the course and there are 16 core practical's on which you will be assessed on these skills in class. In addition to practical investigations, you will study the following topics in-depth:

- Biological molecules
- Exchange and transport
- Modern genetics
- Ecosystems
- Cells and viruses
- Energy for biological processes
- Origins of genetic variation
- Classification
- Microbiology and pathogens
- Control systems

How is this A Level assessed?:

Unit Code	Unit Title	Guided Learning Hours	Term when will this be taught (2 yr course)	Assessment Details	Assessment Weighting
9BIO/01	Advanced Biochemistry, Microbiology and Genetics	100	Autumn – Summer 1 st Year	Examination: 90 mark paper, 1hr 45min	30%
9BIO/02	Advanced Physiology, Evolution and Ecology	100	Autumn – Spring 2 nd Year	Examination: 90 mark paper, 1hr 45min	30%
9BIO/03	General and Practical Principles in Biology	130	Throughout (integrated into the other units)	Examination: 120 mark paper, 2hr 30min [synoptic exam]	40%
9BIO/04	Science Practical endorsement	20	Throughout (integrated into the other units)	Teacher assessment of the practicals will lead to an overall mark of Pass or Fail which will be reported on the results certificate	

In addition, at least 10% of the marks for each paper are awarded for mathematical skills

GCSE grades (minimum) required to enrol on this course:

- 6 in Biology and a 6 in at least one of the other Sciences if studied Separate Science at GCSE
- OR**
- 6-6 in Combined Science
 - 5 in Mathematics
 - 5 in English Language

What can I do with this qualification/Post-18 progression opportunities/ university subjects which this course supports:

Biology is a rigorous academic subject that forms an excellent foundation for any form of study or career in which the ability to make links, research and retain knowledge, discuss and debate controversial issues and have a thorough understanding of scientific investigations are required. Popular post-18 choices include

studying Biology or associated specialties (Biochemistry, Genetics, Physiology etc.) and studying Medicine or medical-related courses such as Dentistry, Optometry, or Physiotherapy.

Other A Level Subjects which support academic attainment/ complement learning

Chemistry, Mathematics, Physical Education

Essential Textbook incl ISBN

Edexcel AS/A Level Biology B Book 1 978-1447991144

Edexcel A Level Biology B Book 2 978-1447991151

Note: Book 1 is needed for the 1st year of the course and Book 2 is needed for the 2nd year of the course

Recommended supplementary resources- websites, blogs, journals:

Biological Sciences Review (access through Canvas)

Course specific equipment- include place to purchase and typical cost or estimate:

A Lab coat is required for all practical lessons in Biology and Chemistry. These can be bought locally from Workwear World Ltd., 441-445 Honey Pot Lane, Stanmore. Approx. cost £16.

Out of lesson learning including trips and visits:

There is usually a field trip to study Ecology and sampling habitats. Approx. cost £100 for a non-residential trip. There are other opportunities for attending non-compulsory courses of interest to Biology students throughout the year.

Lead Teacher to contact: Ms Bagoandas

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Quote from current student:

“Biology has been interesting and the lessons are creatively planned – not just standard and boring! It has been an enjoyable course – especially the practicals!” *Fyshna Bhanderi*