



# PARK HIGH SCHOOL

## Biology

Exam Board: Edexcel

Course Specification: 9BIO

Qualification obtained: The Pearson Edexcel Level 3 Advanced GCE in Biology B

Lead Teacher: Ms Bagoandas

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### Subject 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 practicals 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

Assessment percentage Exam: 100%

### Progression Routes:

Biology is a subject that can open doors for many opportunities at university and for future careers. It provides students with a range of transferable skills. It can lead directly to careers based on Science and Research, Medicine and Healthcare, Agriculture, Sports and Fitness, Engineering as well as the Police and Emergency Services.

### Subject requirements:

- Grade 6 in Biology and a 6 in at least one of the other of the Separate Sciences at OR Grade 6-6 in Combined Science
- Grade 5 in English Language
- Grade 4 in English Literature
- Grade 5 in Mathematics

### Complementary learning:

- Chemistry
- Mathematics
- Physical Education

### Student Quotes:

*“Although A-level Biology is difficult at first, it gets easier once you learn the content properly. It is made to be really enjoyable! The teachers support you a lot.”*

*“Biology has been interesting, and the lessons are creatively planned – not just standard and boring! It has been an enjoyable course – especially the practical’s!”*

## Year 12

### Topics covered:

- Biological Molecules
- Cells and Viruses
- Classification
- Exchange and Transport
- Energy for Biological Processes

## Year 13

### Topics covered:

- Microbiology and Pathogens
- Modern Genetics
- Origins of Genetic Variation
- Control Systems
- Ecosystems

## Assessment

Is 100% Exam. There are three separate exams (9BIO/01, 9BIO/02 9BIO/03) & that are sat at the end of Year 13.

Unit Code	Unit Title	Guided Learning Hours	Assessment Details	Weighting
9BIO/01	Advanced Biochemistry, Microbiology and Genetics	100	Examination: 90 mark paper, 1hr 45min	30%
9BIO/02	Advanced Physiology, Evolution and Ecology	100	Examination: 90 mark paper, 1hr 45min	30%
9BIO/03	General and Practical Principles in Biology	130	Examination: 120 mark paper, 2hr 30min[synoptic exam]	40%
9BIO/04	Science Practical endorsement	20	Teacher assessment of the practical's will lead to an overall mark of Pass or Fail which will be reported on the results certificate	

## Additional information

### Course specific equipment:

A Lab coat is required for all practical lessons in Biology and Chemistry. (This can be bought locally from Workwear World Ltd., 441-445 Honeypot lane, Stanmore. Approx. cost £16.)

### Essential Reading Material:

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 resources:

<https://www.s-cool.co.uk/a-level/biology>

<https://www.thestudentroom.co.uk/>

### Enrichment:

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.