



GET READY TO STUDY A LEVEL BIOLOGY

If you are planning to study A Level Biology with us in September, please review this document and complete the required activities. Please bring the completed activities with you at induction.

FAQ

What specification will I study?

AQA A Level Biology [AQA | AS and A-level | Biology | Specification at a glance](#)

How many lessons will I have a week?

You'll have 4 lessons a week, each lesson is 1 hours and 5 minutes

Who can I contact if I have a question about this subject?

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What subjects go well with Biology?

Chemistry, Maths, Psychology, PE, Geography, Computer Science, Physics

Our advice is not to choose Biology as a "third choice" if you do not need it for progression to university.

What grades should I have?

In addition to the general sixth form entry requirements, learners should have GCSE Grade 6 or above in Biology and another science or two Grade 6s or above in Combined Science. Plus GCSE Grade 5 or above in Mathematics.

WHAT WILL I STUDY?

In Year 1, you will study the following topics:

Biological molecules

Cells

Organisms exchange substances with their environment

Genetic information, variation and relationships between organisms

In Year 2, you will study the following topics:

Energy transfers in and between organisms

Organisms respond to changes in their internal and external environments

Genetics, populations, evolution and ecosystems

The control of gene expression

The assessment for the A-level consists of three exams, which you will take at the end of the course.

Paper 1	Paper 2	Paper 3
What's assessed Any content from topics 1-4 including relevant practical skills	What's assessed Any content from topics 5 – 8 including relevant practical skills	What's assessed Any content from topics 1-8 including relevant practical skills
How it's assessed - Written exam: 2 hours 91 marks 35% of the A-level	How it's assessed - Written exam: 2 hours 91 marks 35% of the A-level	How it's assessed - Written exam: 2 hours 78 marks 30% of the AS-level
Questions 76 marks: a mixture of short and long answer questions 15 marks: extended response questions	Questions 76 marks: a mixture of short and long answer questions 15 marks: extended response questions	Questions 38 marks: structured questions, including practical techniques 15 marks: critical analysis of given experimental data 25 marks: one essay from a choice of two titles

WHAT WILL I NEED?

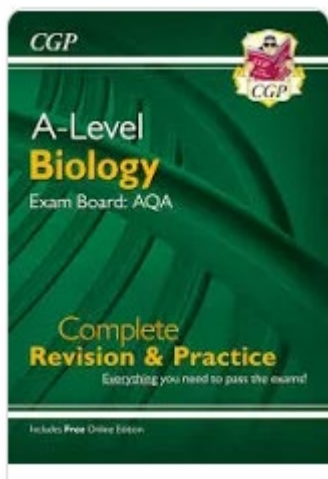
To study the course you will need the following equipment:

- A scientific calculator
- A folder with dividers
- Lined paper
- Pens and pencils
- Highlighters
- A ruler

Students also find it useful to have:

- Blank flashcards
- A whiteboard and whiteboard pens

We also suggest all students buy a revision guide, lab coat and safety glasses, these can be purchased from the college at the start of term. Financial support is available.



FIND OUT MORE

These activities are to help broaden your understanding of the subject in preparation for studying this subject at an advanced level.

Careers	Careers & CPD (rsb.org.uk) What can I do with a biology degree? Prospects.ac.uk Step into the NHS help young people discover NHS careers
YouTube	Miss Estruch - YouTube https://youtube.com/c/PrimroseKittenScience
Specification	A-level Biology 7402 Specification AQA

REQUIRED ACTIVITIES

All GCSE Biology specifications cover seven core topic areas. These topics build a fundamental understanding you will need to study A level biology successfully.

In the **first week** of your A level studies you will have an **initial assessment** based on the following 4 core topic areas.

The questions will be at GCSE level and will include questions which test:

- your ability to process, analyse and evaluate data
- your understanding of practical work

Task 1:

The **4 core topics you need to revise** are:

1. Cell Biology

- **Microscopy & Cell Structure:** Using light microscopes and understanding eukaryotic vs. prokaryotic cells.
- **Cell Transport:** Diffusion, osmosis, and active transport.
- **Cell Division:** Mitosis, the cell cycle, and stem cells.

2. Organisation & Organ Systems

- **Animal Systems:** The digestive system (including enzymes), the heart and circulatory system, and gas exchange.
- **Health & Disease:** Non-communicable diseases (like cancer) and communicable diseases (pathogens, viruses, bacteria).
- **Plant Systems:** Photosynthesis, plant tissues (xylem and phloem), and transpiration.

3. Infection & Response

- **Human Defence Systems:** Physical barriers, white blood cells, and immunity.
- **Medicines:** Antibiotics, painkillers, and the development of new drugs.

4. Bioenergetics

- **Photosynthesis:** The process, equations, and limiting factors.
- **Respiration:** Aerobic and anaerobic respiration, and the body's response to exercise.
- **Metabolism:** The sum of all the reactions in the body.

Listed below are some useful links to help with reviewing the topics and exam question practice:

[AQA GCSE \(9-1\) Biology Revision - PMT](#)

[AQA GCSE Biology Past Papers | Study Notes, Revision Guides](#)

[AQA GCSE Biology Paper 1: Tricky Questions](#)

[GCSE / IGCSE Biology Past Papers - PMT](#)

Task 2:

The progression activities booklet (link below) will support your transition from GCSE Science to A-level. At first, you may find the jump in demand a little daunting, but if you follow the tips and advice in this guide, you'll soon adapt. As you follow the course you will see how the skills and content you learnt at GCSE will be developed and your knowledge and understanding of all these elements will progress.

Work through the GCSE to A Level Biology progression booklet.

[GCSE to A-level progression activities](#)

Then mark your answers (link below)

[Learner progression answers - Biology](#)