

A Level Biology

Why choose this subject?

Studying biology at A-level offers a unique opportunity to explore the intricate mechanisms of life, from the molecular processes within cells to the complex interactions within ecosystems. This dynamic subject not only enhances critical thinking and analytical skills but also provides a solid foundation for a variety of careers in healthcare, environmental science, and research.

As global challenges such as climate change and health crises become increasingly relevant, a deep understanding of biological principles equips students with the knowledge to contribute meaningfully to these pressing issues. Moreover, the hands-on practical experience gained through laboratory work will build on your scientific curiosity and innovation, making A-level biology a rewarding and intellectually stimulating choice.

Who takes this course?

A-level biology is ideal for students interested in the natural world and those pursuing careers in healthcare, environmental science, research, or biotechnology. It suits individuals who enjoy handson lab work and excel in analytical thinking. Overall, it's a great choice for anyone passionate about science and eager to explore the complexities of living organisms.

Where will success take me?

Completing the A-level Biology course will prepare you for either higher education, apprenticeships or to start your career. Examples of careers that align with this course include:

Healthcare (e.g. Medical Doctor, Paramedic, Geneticist, Genetic Engineering, Pharmacology)

Research and development (e.g. Scientific Researcher, Zoologist, Conservationist)

Education (e.g. Science teacher, University Professor, Writer, Wildlife photographer)

Forensic science (e.g. Forensic biologist, crime scene analyst)

Environmental Science (e.g. Veterinarian, Ecologist, Conservationist, Reserve warden)

What Will I Be Studying?

In A-Level Biology, you'll begin by exploring the microbiological foundations of life, focusing on the molecules that make up all living organisms and the cells they form. From there, you'll delve into larger topics, such as how organisms exchange substances with their environment and how genetics influence their characteristics and relationships with other organisms over time. You'll also investigate how different life forms obtain and use energy for essential functions, and how they respond to changes in their internal and external environments to maintain optimal conditions for survival.

Will it fit in my life?

Biology quite literally is life. Everyone benefits from understanding what we are made of, where we



came from and how our body works, but aspiring health care professionals and science researchers will most likely benefit the most.

Why study Biology at COLA-I?

The A-Level Biology course at COLA-I follows the AQA specification, which is widely recognized by universities. We understand that biology is an important foundation for many higher education paths, so we chose a specification that meets university standards.

Our curriculum emphasizes key biological concepts that help students relate their learning to real-world experiences. We structure the content to build a solid knowledge base before introducing more complex ideas. We also recognize that the leap in expectations for student learning can be significant, which is why we offer several checkpoints throughout the year. These include learning reviews, intervention sessions, and exam skills workshops.

Finally, we are committed to helping you create a strong UCAS application by guiding you toward external sessions and work experiences that will enhance your application and increase your chances of success.

Entry Criteria

To be considered for the A-Level Biology course you must have:

Five or more 9-5 GCSE grades including English and Mathematics;

Grade 6 or above in Mathematics GCSE:

Either:

Grade 6-6 or above in Combined Science GCSE.

OR

Grade 6 or above in Chemistry GCSE and Biology GCSE.

How will I be assessed?

The A-Level Biology assessment consists of 3 written exams sat at the end of Year 13:

Paper 1:

Content from topics 1 to 4, including relevant practical skills.

Duration: 2 hours. Total marks: 91 Marks.

Accounts for: 35% of final grade.

Paper 2:

Content from topics 5 to 8, including relevant practical skills.

Duration: 2 hours. Total marks: 91 Marks.

Accounts for: 35% of final grade.

Paper 3:

Content from topics 1 to 8, including relevant practical skills.

Duration: 2 hours. Total marks: 78 Marks.

Accounts for: 30% of final grade.