Integrity
Curiosity
Respect



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A LEVEL

Biology

WHAT IS BIOLOGY?

Biology is the scientific study of living organisms and how they interact with each other and their environments. Biology is a wide-ranging subject from molecular biology to field ecology. Biology explores how living systems are constructed, as well as how they develop, communicate, interact, reproduce, defend themselves, and change the environment around them.

WHY STUDENTS CHOOSE THIS COURSE

Biology suits students that enjoy Science GCSE and wish to study the subject to a far greater level of complexity. It also appeals to students that have good memory skills and want to learn about what goes on inside living organisms.
It is a Science A level that appeals to enquiring minds and whilst it is often chosen to compliment with other Science A levels, Maths and Psychology, Biology can be taken with any combination of other subjects.

WHAT STUDENTS CAN DO WITH THIS COURSE

A Level Biology is particularly useful and usually required for progression to many science-based university courses and careers such as animal science, biology, nursing, medicine, dentistry, zoology, ecology, clinical science, marine biology, life sciences, medicine, environmental science, forensic science or any other subject related to the natural world.
Biology A level is a well-respected course that can help students progress to non-science degree choices such as History, Economics, Finance or Law.

HOW THIS COURSE IS ASSESSED

100% Examination; three exams at the end of the course. A level content is assessed through two 120-minute exams, one covering topics 1-4 (YR1) and the other topics 5-8 (YR2), plus the associated practical skills from the 12 required practical lessons in the course. The third exam covers data analysis and extended writing.

ENTRY REQUIREMENTS

All our course entry requirements are detailed in the Entry Requirements document located in the admissions section of our website.

FURTHER READING

The website below features notes on each Biology topic to give you a snapshot into the content you will be learning:
http://www.a-levelnotes.co.uk/biologyaqa-as- level-notes-new-spec.html

What the course covers

Students study 8 content topics over two years, these are:

1. Biological molecules
Carbohydrates, lipids, proteins and DNA. Students study how large molecules are formed, bonding and properties.

2. Cells
Cell structure as seen through the electron microscope, cell division processes, the mammalian immune system.

3. Organisms exchange substances with their environment
Gas exchange in fish, plants, insects and mammals, the circulatory system, digestion.

4. Genetic information, variation and relationships between organisms
Genes, protein synthesis, taxonomy (classification) and diversity in ecosystems.

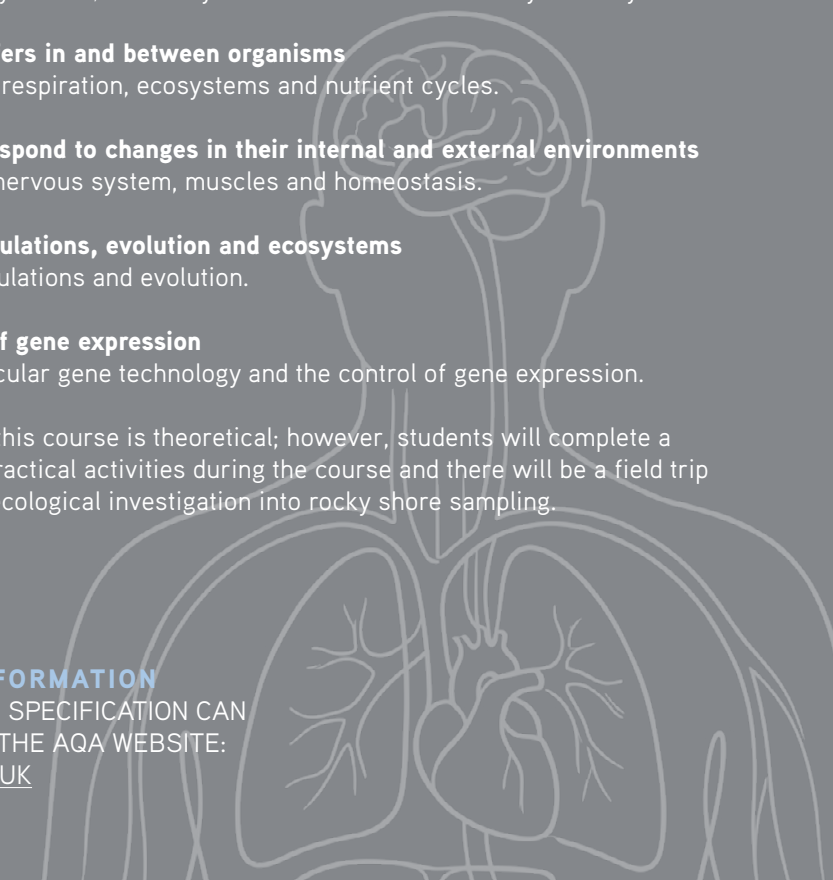
5. Energy transfers in and between organisms
Photosynthesis, respiration, ecosystems and nutrient cycles.

6. Organisms respond to changes in their internal and external environments
Nerves and the nervous system, muscles and homeostasis.

7. Genetics, populations, evolution and ecosystems
Inheritance, populations and evolution.

8. The control of gene expression
Mutations, molecular gene technology and the control of gene expression.

The majority of this course is theoretical; however, students will complete a number of set practical activities during the course and there will be a field trip to complete an ecological investigation into rocky shore sampling.



FURTHER INFORMATION

THE COMPLETE SPECIFICATION CAN BE VIEWED ON THE AQA WEBSITE:
WWW.AQA.ORG.UK