

# A LEVEL BIOLOGY



## Course description

**Awarding Body: AQA (Course code 7402)**

### Examinations

There are three exams at the end of the two years for A-level, all of which are two hours long. At least 15% of the marks for A-level Biology are based on what is learned in the practical investigations and 10% of the marks for A – level Biology are for applied mathematics.

Paper 1: Topics 1,2,3 &4. (2 hours)

Paper 2: Topics 5,6,7 &8. (2 hours)

Paper3: All 8 topics, including a 25 mark synoptic essay question.

Please note that each paper has questions about the 12 practicals which are specified by the exam board (required practicals).

### Non Examined Assessment

There is no coursework on this course. However, there is a practical endorsement process, whereby practical competency against specified criteria (CPAC) are continually assessed as they are completed during the course. Questions relating to the required practicals feature in the exams and completion of them is also mandatory to fulfil the practical endorsement. Attendance at all required practicals is compulsory. In addition to the required practicals, there are many other practical investigations included throughout the course to support the specification.

## Course content

Topics studied:

1. Biological molecules; 2. Cells; 3. How organisms exchange substances with their environment; 4. Genetic information, variation and relationships between organisms; 5. Energy transfers in and between organisms; 6. How organisms respond to changes in their internal and external environments; 7. Genetics, populations, evolution and ecosystems; 8. The control of gene expression.

## Entry requirements

Grade 7 in Biology and also in GCSE Chemistry (triple award) or Grade 8-7 in GCSE Science (double award). This must include Grade 8 in the Biology modules. Since 10% of the marks at AS and A Level require mathematical skills at higher level GCSE, a grade 7 in GCSE Mathematics is an advantage.

## Future opportunities

An A Level in Biology is a highly regarded qualification by both universities and employers as it provides students with excellent and widely applicable analytical skills, as well as practical skills and understanding related to biological science, the fastest moving science. A level Biology is particularly useful for pursuing a career in Medicine or affiliated careers, or as a Clinical molecular geneticist, Nature conservation officer, Pharmacologist, Research scientist, or Marine biologist, amongst many others.

Students in Year 12 are invited to apply for positions as Student Subject Leaders and their role is to promote the subject across the school and mentor younger students. Extracurricular activities to support the students' A Level studies include signposting to free lectures given at universities, guest speakers at school, trips and guidance on further reading.

## Further information

Independent study expectations: At A level you are expected to do more work independently and more of it will be self –directed. We would expect you to do at least 4 hours of independent study each week. This can be wider reading around the subject in periodicals, consolidating knowledge and understanding of previous work, preparing for the next lesson, or completing tasks set as homework.