

# **Biology (OCR)**

#### Intro

If you enjoyed Biology at GCSE here is a chance to extend your studies and further your knowledge of this exciting and challenging subject. You would study the OCR syllabus, which is also studied by the other Science A levels at Emmbrook. A level Biology gives you a general understanding with a focus on problem solving, experimentation and interpreting data. Areas covered include cell biology, physiology, biochemistry and ecology. Your study will involve a combination of practical exercises and theory and will be taught in a well-equipped laboratory by our experienced staff. Biology combines well with many subject options and requires that you have a real interest in the environment and its organisms.

#### Year one content

Your study will look at many aspects of Biology which develops further topics learned at GCSE Science and Biology. Your study will include the following in Year 1:

- Module 1: Development of practical skills, which covers the practical skills that you will develop throughout the course;
- Module 2: Foundations in Biology, covering concepts required through the remaining modules;
- Module 3:Exchange and transport, in which you discover more about exchange surfaces, and transport in plants and animals;
- Module 4: Biodiversity, evolution and disease, which looks into diseases, disease prevention, the immune system biodiversity, classification and evolution.

#### Year two content

At A level the subject continues to study new concepts, also including:

- Module 5: Communication, Homeostasis and Energy;
- Module 6: Control, Genomes and Environment.

The A level will consist of 3 written exams, all of which will be taken in June of the second year of teaching.

The assessment of practical work will be included both in the written exams and through a Practical Endorsement. This will assess students practical capabilities throughout the course and is issued alongside the A level grade as either a Pass or Fail.

### What you need

Five GCSE grades 9 to 4 including 6 in double Science or 6 in Biology and a 5 in English Language and 6 in Maths. An alternative acceptable entry qualification is BTEC L2 (First) Diploma at Merit grade, plus English Language and Maths. As Chemistry and Maths are an integral part of the course a solid grounding in these subjects is essential. A minimum of a D grade at the end of the first year allows you to progress on to your second year of study.

### **Career and further study**

You could progress to higher level study such as a Science or Medicine, or seek employment in a scientific field. Biology provides an essential foundation for a wide variety of career areas including: veterinary science, medicine, ecology, environmental work, nursing,



horticulture, food and biotechnology, biomedical science. Microbiologists, molecular biologists and environmental biologists are particularly in demand at the moment.

## Trips and other costs

You are expected to fund your place on the field course and purchase your own text books.