# Biology

### Overview

Biology is a fascinating and diverse area of study. You will deepen your knowledge of familiar topics such as cells, disease, and body systems and be introduced to advanced topics such as biochemistry and genetics.

Biology is a practical subject and you will quickly learn how to work carefully and accurately. By using a wide range of sources, you will hone your skills in research, note taking and presentation.

#### Awarding Organisation: AQA

Minimum course requirements: GCSE Grade 6-5+ in Trilogy Science (Higher Tier) or 5+ in Biology, and GCSE Grade 5+ in Mathematics. Students should also study A Level Maths or L3 Maths

More information: Mrs Elliot

# Curriculum and assessment

#### **YEAR 12**

Students will gain an excellent basis for future study. You begin by studying how cells function at a molecular level and how substances are transported around organisms. You will then look at the functions of different body systems and how they are affected by disease and the role played by mammalian blood in the defence against pathogens. The second unit takes you off to look at adaptions, diversity and habitats.

#### **YEAR 13**

Students will develop many of the themes encountered in Year 12. You will begin by studying more advanced cell functions such as the role of ATP in respiration and photosynthesis. Towards the end of the course, you will further your knowledge of the control of body systems and deepen your knowledge of genetics and apply your knowledge to understand gene therapy and genetic fingerprinting.

#### **ASSESSMENT**

Three 2 hour examinations Compulsory Practical Endorsement

## Post 18 opportunities

Biologists observe the environment and the behaviour of organisms within it. They may choose to become specialists with a focus on a particular aspect of Biology. Their analytical skills and ability to make connections between complex ideas is of interest to many employers. Academic research, work in the Department of Health, Conservation, Dietician, Food Industry and Production, Laboratory Technician, Journalism, Teaching, Nursing and Midwifery, Pharmacy, the Police Service, Sales or Tutoring are just a few of the careers that Biology qualifications can give access to.

#### Destinations of students in recent years:

Anglia Ruskin University – Biomedical Science
Bangor University – Marine Biology
University of East Anglia – Environmental Science
Kingston University – Biomedical Science
Warwick University – Biomedical Science

### **Expenses**

You will need to purchase text books. We will endeavour to attend at least one series of lectures to supplement the course.