

**GCE AS Biology**

**Exam board: AQA**

**Duration: 1 Year**

**COURSE DETAILS/UNITS AND AIMS**

The AS Biology course is a 1 year course worth a maximum 20 UCAS points. The course contains 4 units each of which contain practical skills assessments that must be passed to gain the qualification.

**Assessment**

The course will be assessed at the end of the year with two 90 minutes exam papers. Paper 1 is made up of 65 marks of short answer questions and 10 marks from comprehension questions. Paper 2 is made up of 65 marks of short answer questions and 10 marks from extended response (essay style) questions. In addition around 15% of the questions will test your practical skills and therefore your ability to understand and carry out practical's is also vital for success as is a good understanding of Higher tier GCSE maths

**Content**

**Unit 1 – Biological molecules**

This section of the unit will look at the biochemistry behind many of the common biological molecules such as carbohydrates, lipids, proteins, water, Enzymes and DNA. You will learn about their structures, uses and importance in living organisms

**Unit 2 – Cells**

In this unit you will start by learning the structures of both Prokaryotic and Eukaryotic cells before going on to look at cell replications, transport mechanisms and the immune system response.

**Unit 3 – Organism Exchange Substances**

This unit will build on and extend your GCSE knowledge of diffusion and osmosis in plants and animals.

You will be studying the exchange systems such as the circulatory and digestive systems and examining the circulatory systems of plants and animals in great detail

**Unit 4 – Genetics**

This is a essential unit for anybody planning on studying for a degree in Biology. You will spend time looking at the structure of DNA and learning the processes of replication, translation and transcription. You will look at meiosis and how genetic mutations happen and what the knock on effect might be for that organism. You will be learning essential aseptic techniques to allow you to work in a commercial lab before spending time looking at diversity and how you might carry out studies and research into plant and animal populations

**SKILLS AND QUALIFICATIONS REQUIRED**

The skills you will need to develop and extend will include practical lab skills, report writing and research techniques. There will be an expectation that after each practical you would write up the investigation in full during your private study time. Therefore you must also be comfortable with fully writing up investigations, analysing and presenting the data and able to draw conclusions based on your evidence. Due to the technical nature of this subject entry requirements are **BB in your GCSE Sciences**, one of which must be biology if you took the triple award and a **B for GCSE Mathematics**.

**CAREER INFORMATION**

A good stepping stone for those that wish for careers in hundreds of fields for example laboratories such as a hospital infection labs and forensic crime labs, field research such as the environment agency and even medical/genetic research.



Scan this code for more careers information

**FURTHER INFORMATION PLEASE CONTACT - Mr D Huckin**