BIOLOGY

Examination Board Specification: AQA 7402

Why Study Biology?: Students will develop knowledge and understanding of biological facts, concepts and principles together with an appreciation of their significance. Students will develop an understanding of the relationship between theory and practice and they will be expected to study environmental, economic, ethical and technical issues through guided, but independent, reading of textbooks, broadsheet newspapers and scientific journals such as New Scientist. In this way students ought to develop an appreciation of living organisms and recognise the use and nature of biology in society.

Content and Assessment of the Course:

A-Level
This is a two year course which will be examined in the Summer of 2017. While there is no coursework/controlled assessment there are 12 required practicals to be carried out; 6 in the first year of the A level and the remaining six in the second year. The carrying out of these required practicals will cover the basic apparatus and techniques that all students are required to know and will be assessed in the three written papers. **Core content topics** 1. Biological molecules 2. Cells 3. Organisms exchange substances with their environment 4. Genetic information, variation and relationships between organisms 5. Energy transfers in and between organisms 6. Organisms respond to changes in their internal and external environments 7. Genetics, populations, evolution and ecosystems 8. The control of gene expression
Assessments
Paper 1 This paper will assess any content from topics 1–4, including relevant practical skills. The paper contains a total of 91 marks where 76 marks are obtained from a mixture of short and long answer questions and 15 marks are obtained from extended response questions. The length of the examination is 2 hours and it is worth 35% of the A-Level.
Paper 2 This paper will assess any content from topics 5–8, including relevant practical skills. The paper contains a total of 91 marks where 76 marks are obtained from a mixture of short and long answer questions and 15 marks are obtained from a comprehension question. The length of the examination is 2 hours and it is worth 35% of the A-Level.
Paper 3 This paper will assess any content from topics 1–8, including relevant practical skills. The paper contains a total of 78 marks where 38 marks are obtained from structured questions, including practical techniques, 15 marks are obtained from critical analysis of given experimental data and 25 marks are obtained from one essay from a choice of two titles. The length of the examination is 2 hours and it is worth 30% of the A-Level.

Additional Information: There is one compulsory field trip in the A Level course. The trip which will occur at the end of the first year of the A-level will be held at a residential course at Orielton Field Studies Centre, Pembroke, Wales.

Entrance Requirements: GCSE grade 7 in Biology or Additional Science, or the Biology component of Additional Science.