**Biology A Level**

This is the new linear course which is examined at the end of year 13. There is the option to sit the AS exam at the end of year 12 but this result cannot be credited towards the full A level course, and is a separate stand alone qualification.

The course is delivered within 6 teaching periods each week, split between two teachers.

**The course is divided into 6 modules.**

**Module 1 - Development of practical skills in biology**

This is studied and assessed within all teaching modules throughout both years and includes 12 Practical Activity Groups which must be completed in order to be awarded a pass. These tasks will ensure students develop good practical skills and gain experience of using a range of equipment and techniques. Students must keep a record of their practical tasks.

Skills include planning, implementing, analysis and evaluating and they will be assessed in the terminal exams within the teaching modules.

**Year 12 Modules**

**Module 2** **–** **Foundations in biology**

Cell biology, microscopy, membranes, biochemistry, enzymes, nucleic acids and cell division,

**Module 3** **–** **Exchange and transport**

Gas exchange in mammals, fish and insects, animal transport including heart structure, cardiac cycle, dissociation curves, transpiration and translocation.

**Module 4** **– Biodiversity, evolution and disease**

Diseases including malaria, HIV, T.B. and fungal infections. Immunity, and treatments. Measuring the environment, calculating biodiversity, conservation. Classification, variation, natural selection and the theory of evolution.

**Year 13 Modules**

**Module 5** **– Communication, homeostasis and energy**

Hormones, nervous control and the brain, kidneys and excretion, the liver, the pancreas and control of blood glucose, respiration, photosynthesis, plant tropisms muscles,

**Module 6** **– Genetics, evolution and ecosystem**

Patterns of inheritance, variation, evolution, gene technology, biotechnology. Energy transfers through ecosystems, sampling, succession, carbon and nitrogen cycle, population growth, predator-prey relationships, sustainable management of resources.

**Independent Study**

Students are expected to complete a programme of independent study in addition to homework tasks. The schedule for each term, which includes any worksheets instructions and deadlines is set out on a document which is located in the Independent Study File on the BWS website in the Biology Files. Lessons are designed to follow up on independent study so it is important that all work is completed on time. The full schedule is available to allow students to get ahead if they have spare capacity, freeing up time for revision or other commitments.

**Assessment**

Students are regularly assessed at the end of each module and at key points within the year. Students will have a tracking sheet to keep a record of progress in each module and exam. Results should be compared to the target grade agreed at the beginning of the year. Students will have a separate sheet to record their completion of the practical tasks.

 The biology teachers will use these results to determine the UCAS predicted grade.

* Topic tests at the end of each module, approximately 2 per term
* June Year 12 exams
* Year 13 Preliminary exams

**Examinations**

There are three papers with the first series in summer 2017

|  |  |  |  |
| --- | --- | --- | --- |
| **Paper** | **Weighting %** | **Length** | **Modules examined** |
| **Paper 1 Biological Processes** | 37 | 2 hours 15 min | 1,2,3,5 |
| **Paper 2 Biological Diversity** | 37 | 2 hours 15 min | 1,2,4,6 |
| **Paper 3 Unified Biology** | 26 | 1 hour 30 min | All modules 1-6 |

Practical endorsement assessed throughout the course and reported separately.

**AS Exams**

These examine modules 1 to 4 in two papers. The first papers will be set for summer 2016.

|  |  |  |
| --- | --- | --- |
| **Paper** | **Weighting** | **Length** |
| **1 Breadth in Biology** | 50% | 1hour 30 min |
| **2 Depth in Biology** | 50% | 1hour 30 min |

**Enrichment**

* Field course
* Biology Olympiad
* Dissection
* Biology extension group
* Revision sessions