

## **SUBJECT: BIOLOGY IB HIGHER**

**HEAD OF DEPARTMENT:  
MRS K ARDLEY  
HEAD OF SUBJECT:  
MISS H PEACH**

**SYLLABUS NUMBER:**

N/A

### **SYNOPSIS OF CONTENT**

**Core topics** studied by both Standard and Higher level students.

1. Cell biology
2. Molecular biology – study of biologically important molecules.
3. Genetics – study of inheritance.
4. Ecology
5. Evolution and biodiversity
6. Human physiology

**Additional Higher Level (AHL) topics** studied by higher level students only.

7. Nucleic acids (DNA, RNA)
  8. Metabolism, cell respiration and photosynthesis.
  9. Plant biology
  10. Further genetics and evolution.
  11. Animal physiology
- Option C – Ecology and conservation

### **SKILLS THAT WILL BE DEVELOPED**

The ability to demonstrate an understanding of biological facts, concepts and terminology.

The ability to apply and use biological facts and concepts.

The ability to formulate, analyse and evaluate hypotheses, scientific methods, explanations, techniques.

### **SOME USEFUL WEBSITES**

<http://i-biology.net/>  
<http://www.bozemanscience.com/biology-main-page/>  
[http://highered.mheducation.com/sites/0072507470/student\\_view0/index.html](http://highered.mheducation.com/sites/0072507470/student_view0/index.html)  
<http://www.bioknowledgey.info/>

### **ASSESSMENT**

**External assessment** – 3 exams taken at the end of the course

**Paper 1:** 40 multiple choice questions on core and AHL topics. The paper lasts 1 hour is worth 20% of the final result.

**Paper 2:** a data based question, several short answer questions and 2 extended response questions in 2¼ hours worth 36% of the final result. The questions on this paper are from the core and AHL material.

**Paper 3:** Section A - Two or three short answer questions based on experimental skills and techniques and analysis and evaluation of unseen data. These questions are linked to the core and AHL material. Section B - Several short answer and extended response questions from option C. This paper is 105 minutes long and is worth 24% of the final result.

**Internal assessment** of an individual investigation which will involve practical work. This is worth 20% of the final result

### **SPECIFIC MATRICULATION REQUIREMENTS**

A **grade B** or higher in GCSE Biology, Core **and** Additional science. Students **must also** have achieved a grade B or higher in the Biology components of their Core and Additional Science GCSEs. A **grade 6** or higher in GCSE mathematics is additionally required.

### **OTHER INFORMATION** **E.g. Field Trips/expenses/books**

All students who study Biology in the Sixth Form are advised to attend a field course. During the course students have the opportunity to collect data for their practical assessment (worth 20% of their final grade) and to cover material from the ecology and conservation option. This course normally takes place in June of the Lower Sixth.