Curriculum Guide | Key Stage 4

SUBJECT: Biology YEAR: 10 & 11

HEAD OF DEPARTMENT: Dr Craig

GROUPING POLICY: Mixed Ability

EXAM BOARD: AQA

ASSESSMENT: 100% External Examination

Link to Specification:

Students follow the AQA GCSE Biology course. This is examined at the end of Year 11 https://www.aqa.org.uk/subjects/science/gcse/biology-8461

COURSE CONTENT

What will my child learn?

Over the two years of the GCSE course, students will study the following topics:

- 1. Cell Biology: what are cells, what are they made of and how do they divide?
- 2. **Organisation**: how are cells organised into structures such as the heart?
- 3. Infection and Response: how do bacteria and viruses cause disease?
- 4. **Bioenergetics**: students will study how plants and animals generate energy.
- 5. Homeostasis: how do we regulate our blood sugar levels and body temperature?
- 6. **Inheritance, Variation and Evolution**: how did living things arise and how do we classify them?
- 7. **Ecology**: students will study how living things interact in a habitat, and the impact that humans are having on the environment.

What will homework look like?

Students will be set one homework per week. This may be a written task to consolidate material learnt in class, revision for a test or the learning of key terminology.

What enrichment opportunities are available?

Enrichment opportunities will be arranged and communicated to students as the course progresses. These will include speakers and activities in school.

ASSESSMENT

How will my child's work be assessed?

Students will be assessed formally by each teacher in every reporting cycle; the test will be common to the whole cohort. Students will be given 1-9 grades for these tests. We will also use mathematical techniques to track students' progress against prior attainment. All of those who we judge not to be progressing as we expect, will be invited to attend a retest in the first instance,

Curriculum Guide | Key Stage 4

and then considered for additional support. In addition, students' progress will be assessed continuously through their classwork, homework and smaller in-class tests.

Practical skills will be developed through 'required practicals' set by the exam board. These are examined formally in written examinations at the end of Year 11. However, students will need to have experienced the class practicals in order to answer the questions. Students who miss the practicals will be asked to catch up, and invited for additional support after school if they do not or cannot do this themselves.

There are two written examination papers which students will sit at the end of Year 11. Each paper will assess a set of topic areas and consist of a mixture of multiple choice, structured, closed short answer and open response questions.

Paper 1: Assesses the topics on Cell Biology; Organisation; Infection and Response; and Bioenergetics (50% of GCSE), 1 hour 45 minutes.

Paper 2: Assesses the topics on Homeostasis and Response; Inheritance, Variation and Evolution; and Ecology (50% of GCSE), 1 hour 45 minutes.

ADDITIONAL INFORMATION

How can I support my child in this subject?

- Be positive about learning Science when speaking to your child, whatever your personal experience of Science was.
- Discuss what your child is learning in Science with them; get them to explain everyday phenomena to you. Draw their attention to and discuss scientific advances that are reported in the news.
- Your child should receive homework weekly please insist that this is completed to a good standard. If you are able to, help your child to complete their homework. If they get stuck, encourage them to contact their teacher, who will be happy to help.
- Look through your child's Science book with them. Ask them to show you work that they are interested in or proud of.
- Encourage them to access the resources available to them on the school website.

How can I support my child with exams?

- Upcoming tests will be publicised on SatchelOne. Help them to identify the material they need to revise using the revision lists they are given.
- Revision sessions will be offered prior to tests and publicised on SatchelOne. Please encourage your child to attend.
- Help your child to plan their revision a little, often is much better then cramming.
- Try to encourage your child to revise actively by condensing their notes, making mind maps, making revision cards. Ask them to identify specifically what they are learning then test them on it.