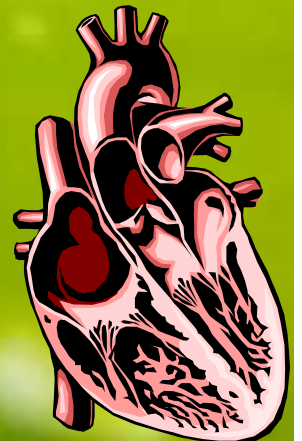
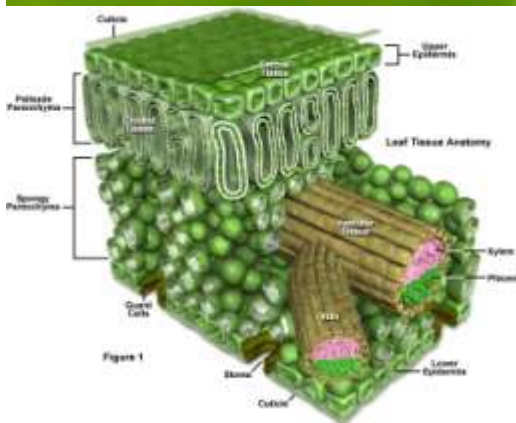
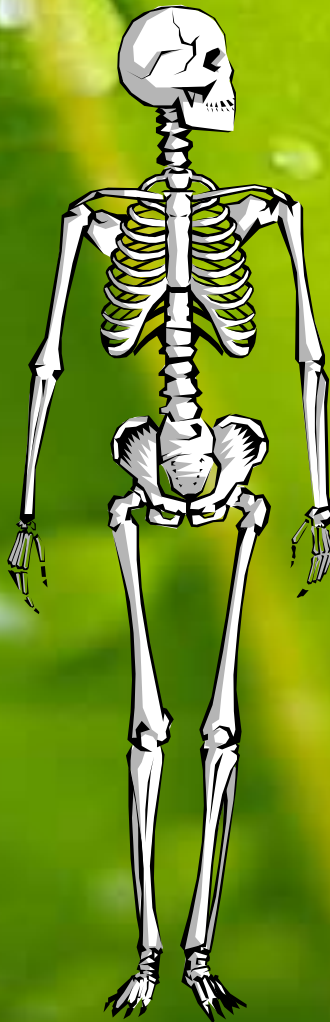


Biology

Subject Booklet



Course Outline

Congratulations on choosing an exciting, relevant and highly considered A-level subject

OCR Biology is a modular course consisting of 2 exams and coursework in AS and 2 exams and coursework in A2.

It aims to develop essential knowledge and understanding of different areas of biology how they relate to each other, develop your interest and enthusiasm for biology, and appreciate how society makes decisions about scientific issues.

Teachers

Mrs Travers - Head of Biology

Mrs Lear

Mrs McMeeking



Courses / Careers after the A-level

Biology is a subject that can lead onto many university courses and career options. It is a named requirement for up to 15 of the most popular degree courses and is valued within Science and Art subjects, varying from Medicine / Veterinary Science, Geology, Material Science, Occupational Therapy, Psychology, and sport science.

Exams and Assessment



UNIT	EXAM CODE	DATE EXAMINED	TITLE / CONTENTS
1	F211	Jan 2010	Cells, Exchange and Transport.
2	F212	May 2010	Molecules, Biodiversity Food and Health
3	F213	Feb 2010	Practical Skills in Biology
4	F214	Jan 2011	Communication, Homeostasis and Energy
5	F215	June 2011	Control, Genomes and Environment.
6	F216	Feb 2011	Practical Skills in Biology 2

Units 3 and 6 are the coursework assessments.

Remember for each exam you will need to take a pen, pencil, ruler and a calculator

Exam results will be available in the 2nd week of March for the Jan exam and the 2nd week of August for the May / June exams

Re-sits

We will have consultations with each student following results and will advise you of where your grade stands. If you choose to re-take an exam after this advise it will require YOU to complete a re-sit form Mrs O'Malley in the exams office . There will be charge for each exam and you will need the exam codes given in the table above.



Coursework

(30%)

AS

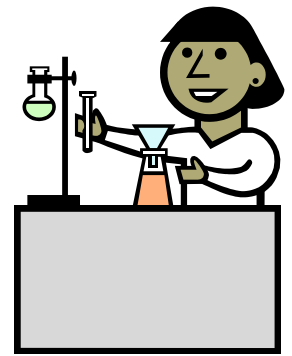
3 practical tasks;

- * Quantitative 10 marks
- * Qualitative 10 marks
- * Evaluation 20 marks

Coursework	Date of assessment	Complete		Mark
		✓	x	
Quantitative				
Qualitative				
Evaluation				

The Quantitative (number results) and Qualitative (colour results) tasks require you to perform an individual practical in exam conditions. You will gain marks for the results, how they are displayed and your answers to the questions.

The Evaluation task will be based on one of your practical's and will require you to produce a graph and use you Biological knowledge and understanding to explain the results and practical.



A2

3 practical tasks; (this will be based on the field work carried out in Swanage)

- * Quantitative 10 marks
- * Qualitative 10 marks
- * Evaluation 20 marks

Coursework	Date of assessment	Complete ✓ x	Mark
Quantitative			
Qualitative			
Evaluation			

Notes

Time will be measured in seconds

Axis need labels and units

Carefully read the words in bold

What are your control variables?



Independent Study

As part of your commitment to this subject you need to be pro-active and complete 5 hours of Independent study. This can include;

- * Set homework
- * Completing / re-organising lesson notes
- * Reading through your course textbook, either recapping the last lesson or preparing for the next lesson.
- * Using recommended websites, exam papers to complete practice questions and test your understanding.
- * Taking a topic you have found harder to understand and working through the recommended resources to improve.

The object of education is to prepare the young to educate themselves throughout their lives. ~Robert Maynard Hutchins

Resources to use

Websites

www.examcafe.com - specific exam questions for our course

www.ocr.org.uk - information on specifications and past papers

Reading Material;

OCR Biology textbook - set out in the modules providing excellent diagrams, glossary, and practice exam questions.

Clegg and McClean - This is a great resource book, which will explain theorys and provide diagrams in a different format. It should also be used for additional reading and understanding.

Subject Glossary



Exam Terms

Define — give a definition of the terms

Describe — What can you see

Compare — In a sentence talk about BOTH the factors you are looking out. (key words to use - both, whereas, however, and)

Explain - Use your subject knowledge to give reasons why

Suggest - apply what you have learnt about other examples to this new idea.

Coursework Terms

Dependent Variable - the factor that you are measuring e.g. How long the reaction takes. Plotted on the y axis

Independent variable - the factor that you have set / controlled e.g. The temperatures you want the experiment to take place at. Plotted on the x axis.

Buffer - a solution that maintains a constant pH during throughout the investigation

Rate of reaction $= 1/\text{time}$

Control - a factor that could affect your results and is therefore kept the same to maintain constant.

Anomalous - a result that looks out of place with the other results or readings.

Bonds

Glycosidic - between carbohydrate molecules

Ester - between glycerol and fatty acids

Hydrogen - between water molecules, negative to positive .

Peptide - between amino acids

