

HIGHER BIOLOGY

Welcome to Higher Biology. Congratulations on what you have achieved so far. Here is some general information that you may find helpful.

Course Structure and Methods of Teaching

Higher Biology consists of three units: Cell Biology, Genetics & Adaptation and Control & Regulation. These will be studied in the order mentioned; each unit takes around 40 hours to complete.

The Higher course is taught using a mixture of teacher-led discussion, PowerPoint presentations, practical work, note taking, essay writing and text-book questions. Other types of activities will also be used as appropriate.

To get an award in Higher Biology you will require to pass three internally assessed NABs, submit a written report on an experiment and pass the final exam in May. The final exam consists of three sections totalling 130 marks: Section A - Multiple Choice (30 marks), Section B - Short Answer Questions (80 marks), Section C - Essay Questions (20 marks).

Resources and Equipment

The following equipment will be supplied by your teacher: jotters, past papers with answers, a Torrance Higher Biology textbook.

You will need to supply the following: a ring binder (in which to keep handouts), pens and pencils.

The following resources are found in class but it would be useful if you had your own: ruler, calculator.

You will also find in class a variety of textbooks which may help you and the school will issue you with a password for the online Scholar revision web-site. A list of other web-sites which you may find useful can be found on the Biology notice-board.

Homework Policy

Each week you will receive homework. This may consist of essays, problem solving questions, multiple choice questions or past paper questions. From time to time other homework activities may be given instead of/as well as those mentioned above.

A Final Word of Caution

Please be under no illusions that in order to pass Higher Biology you will have to be dedicated and put in a lot of effort. Your teacher will help you as much as possible, but if you have any difficulties please let them know - we can only help if we know the difficulties exist in the first place. Supported study classes and Easter School will also be available to support you.

Timeline 09/10 - Higher Biology

Week beginning	Topic	Assessment Info.
2 nd June 2009	Cell variety	
8 th June 2009	Cell variety	
15 th June 2009	Absorption and secretion of materials	Experiment write-up
22 nd June 2009	Absorption and secretion of materials	
29 th June 2009	ATP and energy release/Chemistry of respiration	
19 th August 2009	Chemistry of respiration	Interim test 1a (Chapters 1-4)
24 th August 2009	Role of photosynthetic pigments/Chemistry of photosynthesis	
31 st August 2009	Chemistry of photosynthesis	
7 th September 2009	DNA and its replication	
14 th September 2009	RNA and protein synthesis	
21 st September 2009	Functional variety of proteins/Viruses	
28 th September 2009	Cellular defence mechanisms	Interim test 1b (Chapters 5-11)
5 th October 2009	NAB revision	Unit 1 NAB
26 th October 2009	Meiosis/Monohybrid cross	
2 nd November 2009	Dihybrid cross/Sex linkage	
9 th November 2009	Mutation	Interim test 2a (Chapters 12-16)
16 th November 2009	Natural selection/Speciation	
23 rd November 2009	Adaptive radiation/Extinction & Conservation	
3 rd December 2009	Artificial selection	Interim test 2b (Chapters 17-21)
7 th December 2009	Maintaining a water balance - animals & plants	
14 th December 2009	Obtaining food - animals & plants	
5 th January 2010	Coping with dangers/NAB revision	Experiment write-up Interim test 2c (Chapters 12-26)
11 th January 2010	NAB revision	Unit 2 NAB
18 th January 2010	PRELIM REVISION	PRELIM (Units 1 & 2)
25 th January 2010	Plant growth/Growth patterns	
1 st February 2010	Genetic control	
8 th February 2010	Hormonal influences on growth	Experiment write-up
18 th February 2010	Effects of chemicals/light on growth	Interim test 3a (Chapters 27-32)
25 th February 2010	Physiological homeostasis	
1 st March 2010	Regulation of populations/Monitoring of populations	
8 th March 2010	Succession in plant communities	Interim test 3b (Chapters 33-36)
15 th March 2010	NAB revision	
22 nd March 2010	NAB revision	Unit 3 NAB PRELIM (Unit 3)
April 2010	EXAM REVISION	
May 2010	EXAM REVISION	FINAL EXAM