



Biology

1. Expectations for success are:

- applying full effort in all lessons and homework time
- maintaining up to date notes based on class work and your own reading on the topics studied
- all homework to be completed to the best of your effort and handed in on time
- maintaining an accurate and complete record of practical work over the two years to allow assessment for the practical endorsement
- making extensive use of practice papers and questions
- willing to seek help and act on advice

2. The characteristics of an outstanding student in this subject are:

As an outstanding learner in A Level Biology you must be **self-motivated** and **responsible for your own learning** – you should use your own time to ensure your notes are complete and up to date, review work and complete practice papers without prompting from your teacher. You should be proactive in seeking help and acting on advice.

You should develop good **practical skills** – including a **methodical** and **organised** approach to practical work, **attention to detail** and an ability to **analyse data** effectively. You must keep an accurate and complete record of all practical work as this will form part of your assessment and you will be awarded a pass or fail grade for practical work alongside your A Level grade.

An outstanding learner should **review and revise** work covered regularly, not just in preparation for tests and exams. You should complete as many **practice papers and questions** as possible and take all tests seriously and **prepare thoroughly** to gain an understanding of your strengths and weaknesses.

You should have high level **literacy skills** – this is essential to success in this course. This includes keeping a glossary of key words, using **scientific terms accurately**, structuring essay questions logically and describing processes in a **high level of detail**.

You should also demonstrate a keen **interest** in Biology including the chemistry of the reactions that take place in the body, the physiology of the human body, plant physiology, evolution, conservation and the environment. You should **read widely** around the subject, including journals and popular science books.

3. Wider reading list

Course specific texts:

- Cambridge Biology 1 for OCR
- Heinemann OCR AS Biology Student Book
- CGP AS-Level Biology OCR Complete Revision & Practice
- Philip Allan OCR AS Biology Student Unit Guide: Unit F211 Cells, Exchange and Transport
- Philip Allan OCR AS Biology Student Unit Guide: Unit F212 Molecules, Biodiversity, Food and Health

Books:

- A short history of nearly everything - Bill Bryson
- Genome - the autobiography of a species - Matt Ridley
- Unweaving the Rainbow: science, delusion and the appetite for wonder - Richard Dawkins
- The Oxford book of modern science writing - Selected by Richard Dawkins
- The blind watchmaker - Richard Dawkins
- Your inner fish: the amazing discovery of our 375-million-year-old-ancestor - Neil Shubin
- Human evolution: a very short introduction - by Bernard Wood
- Ethics: a very short introduction - Simon Blackburn
- Medical ethics: a very short introduction - by Tony Hope
- Advice to a young scientist - Peter Medawar
- The chemistry of life - by Steven Rose
- Understanding the Human Genome Project - Michael Palladino
- Stem Cell Now: a brief introduction to the coming medical revolution - Christopher Thomas Scott
- The origins of virtue - Matt Ridley
- The brain book - Rita Carter

Magazines & Journals:

- Biological Sciences Review - aimed at sixth formers. A reduced cost subscription is available through WGSB
- New Scientist
- Nature
- Scientific American

Independent Study ideas

- Reading text book chapters relevant to the current topic of study
- Reading text book chapters relevant to the next topic of study
- Writing notes on each topic based on classwork and personal research
- Writing summary and revision notes
- Completing practice papers and questions
- Reading newspaper, magazine and journal articles relevant to topics studied or wider Biology topics
- Practice essay writing
- Creating flash cards and spider diagrams
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Websites

- <http://www.ocr.org.uk/qualifications/as-a-level-gce-biology-a-h020-h420-from-2015/> - this website contains a link to the specification and will contain more materials as the new course progresses.
- <https://royalsociety.org/>
- <http://www.biozone.co.uk>
- <http://www.biologymad.com>
- <http://www.cellsalive.com>
- <http://www.centreofthecell.org>
- <http://www.biology-online.org>
- <http://learn.genetics.utah.edu/>