

# Advanced Biology Reading List

*Reading around the subject is important to your overall success because it...*

- *Helps you to make sense of the topics that you are studying in class*
- *Keeps you up to date with current biological research*
- *Informs, inspires and challenges you to find out more.*

*Follow the links and investigate the books listed below.*

## Recommended Textbooks

Follow this link to the AQA website detailing some of the recommended textbooks:

<http://www.aqa.org.uk/resources/science/as-and-a-level/biology-7401-7402/teach/textbooks>

## Journals and magazines

**Biological Sciences Review** - This magazine is written specifically for students of A level Biology, Scottish Higher Biology and first year Biological Sciences undergraduates. It is highly readable and bridges the gap between your textbooks and scientific journals. There is a charge for subscribing to the magazine. An archive of articles from previous issues can be found on the [magazine's website](#).

**New Scientist** - This is a weekly science magazine that keeps you up to date with what's new in science. If you wish to become a subscriber, you will have to pay, but your school or college may already subscribe. Ask your teacher or learning resource manager. <http://www.newscientist.com/>

**Nature** - This is an international weekly journal of science. <http://www.nature.com/>

## Books

*I have highlighted a few books that I know to be excellent and are well worth reading. However, I'm not familiar with all of the books on the list so some of the others could be even better! Read them and tell your classmates (and me) what you think of them.*

**Alice Roberts: *The Incredible Unlikelihood of Being***

Alice Roberts combines embryology, genetics, anatomy, evolution and zoology to tell the incredible story of the human body

**Ben Goldacre: *Bad Science***

Looking objectively at popular science reporting.

Michael Pollan: *The Botany of Desire*

A very different approach to science writing, Michael Pollan turns our normal perspective on its head to consider how plants manipulate humans.

Steve Jones: *Almost Like A Whale*,

Using contemporary science to update Charles Darwin's "The Origin of the Species".

Holly Tucker: *Blood Work: A Tale of Medicine and Murder in the Scientific Revolution*

The dramatic history of blood transfusions, from 17th century France onwards.

Nessa Carey: *The Epigenetics Revolution*

A fascinating introduction to epigenetics. If you enjoy this, follow up with *Seed to Seed* (see below).

Nicholas Harberd: *Seed to Seed*

A research scientist tells the story of ten years of discovery in his own laboratory. A very valuable insight into contemporary genetics and epigenetics research, and what it means to be a scientist.

Rebecca Skloot: *The Immortal Life of Henrietta Lacks*,

How one woman's cancer cells changed the medical world forever, and because a multi-million dollar industry.

Jennifer Ouellette: *Calculus Diaries*

A non-mathematician finds out how maths can help you tackle anything – even a zombie apocalypse.

Nick Lane: *Life Ascending*

Where does DNA come from? How did the eye evolve? A reconstruction of evolutionary history through ten of its greatest landmarks.

Richard Dawkins:

*The Selfish Gene*

*The Blind Watchmaker*

*Unweaving the Rainbow*

*Climbing Mount Improbable*

*The Ancestor's Tale*

Steve Jones:

*Y: The Descent of Men*

*In the Blood: God, Genes and Destiny*

*The Language of the genes*

Matt Ridley:

*Genome: The Autobiography of a Species in 23 Chapters*

*The Red Queen: Sex and the Evolution of Human Nature*

*The Language of Genes*

*Francis Crick: Discoverer of the Genetic Code*

*Nature Via Nurture: Genes, Experience and What Makes Us Human*

James Watson:

*DNA: The Secret of Life*

*The Double Helix: Personal Account of the Discovery of the Structure of DNA*

Lewis Thomas:

*The Lives of a Cell: Notes of a Biology Watcher.*

*The Medusa and the Snail: More Notes of a Biology Watcher* Barry Gibb: *The*

*Rough Guide to the Brain (Rough Guides Reference Titles)*

*Charles Darwin: The Origin of Species*

Armand Marie Leroi: *Mutants: On the Form, Varieties and Errors of the Human Body*

David S. Goodsell: *The Machinery of Life*

Ernst Mayr: *This Is Biology: The Science of the Living World*

George C. Williams: *Plan and Purpose in Nature*

Steve Pinker: *The Language Instinct*

Edward O Wilson: *The Diversity of Life*

Richard Leaky: *The Origin of Humankind*

*Bill Bryson: A Short History of Nearly Everything*

Oliver Sachs: *The Man Who Mistook His Wife For A Hat*

Daniel Chamovitz: *What A Plant Knows*

## Websites

<https://www.rsb.org.uk/students> Royal Society of Biology - student site.

[http://www.bbc.co.uk/news/science\\_and\\_environment](http://www.bbc.co.uk/news/science_and_environment) The BBC news page for Science and the Environment.

<https://www.ted.com/topics/biology> TED talks Biology homepage.

<http://www.ibiblio.org/virtualcell/index.htm> interactive cell biology site.

<http://www.accessexcellence.org/RC/VL/GG> A web site showing illustrations of many processes of biotechnology.

<http://www.dnai.org/a/index.html> Explore the genetic code

<https://www.nobelprize.org> Details of the history of the best scientific discoveries

<http://www.nhm.ac.uk> The London Natural History Museum's website with lots of interesting educational material.

<http://www.bmj.com> The website of the British Medical Journal