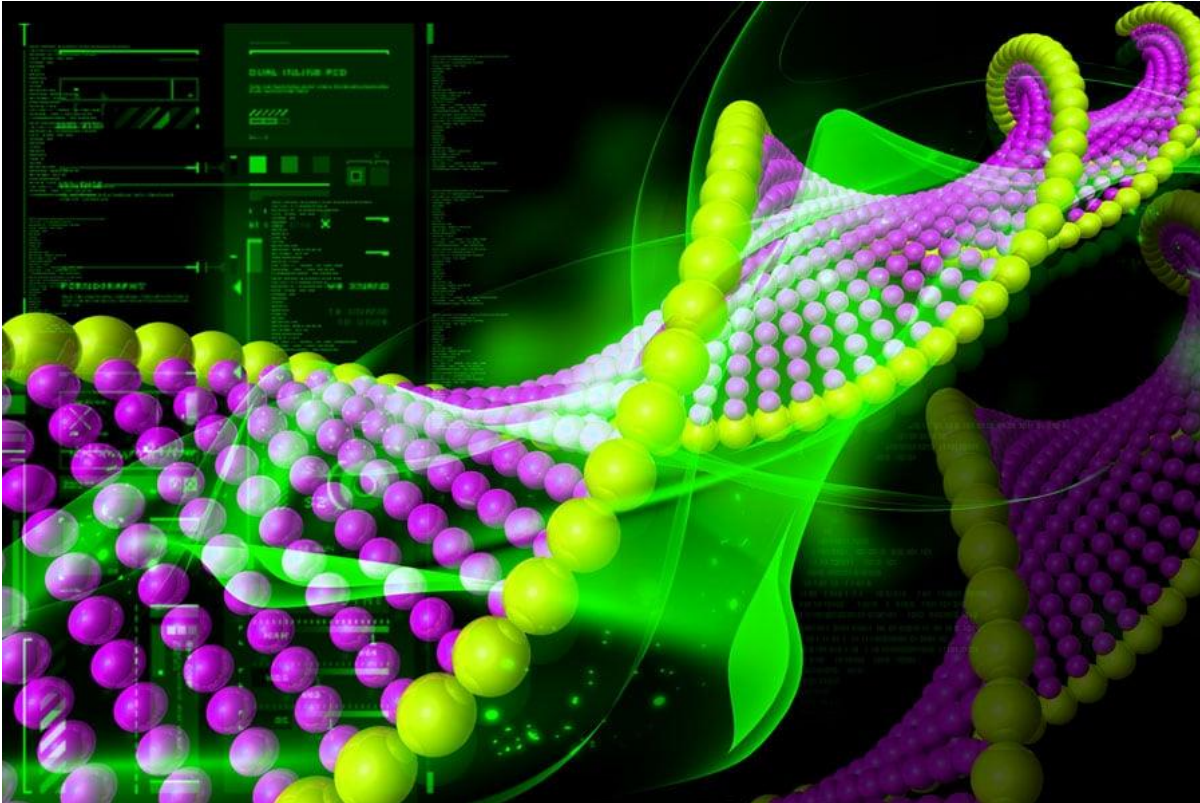




**Year 11 - 12 Biology Transition Work
2022**

Welcome to Biology

This pack contains information regarding the course structure, equipment/ reading and website lists and transition work to prepare you to start your Year 12 course in September.



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Course Structure

AO1 – Knowledge and understanding (30-35% of overall assessment)

AO2 – Application (40-45% of overall assessment)

AO3 – Analysis/interpretation/evaluation (25-30% of overall assessment)

Assessments

Paper 1

What's assessed

- Any content from topics 1–4, including relevant practical skills

Assessed

- written exam: 2 hours
- 91 marks
- 35% of A-level

Questions

- 76 marks: a mixture of short and long answer questions
- 15 marks: extended response questions

Paper 2

What's assessed

- Any content from topics 5–8, including relevant practical skills

Assessed

- written exam: 2 hours
- 91 marks
- 35% of A-level

Questions

- 76 marks: a mixture of short and long answer questions
- 15 marks: comprehension question

Paper 3

What's assessed

- Any content from topics 1–8, including relevant practical skills

Assessed

- written exam: 2 hours
- 78 marks
- 30% of A-level

Questions

- 38 marks: structured questions, including practical techniques
- 15 marks: critical analysis of given experimental data
- 25 marks: one essay from a choice of two titles

What do I need to do in A Level Biology?

- Be genuinely interested in the field of Biology – that includes the study of all life (plants, animals, microorganisms)
- Make up any shortfalls you may have in knowledge (for example, if you do not do chemistry, make sure you take the time to study the chemistry you need in Biology)
- Study at least ONE hour for every hour of lesson time – if you are struggling, you will need to do more
- Show evidence that you are reading around the topics studied in lessons
- Ask for help as soon as you realise if you are falling behind
- Make sure you read up on the lesson (in text) before the lesson
- Practise and use the language of Biology consistently and correctly
- Join a Biology study group and attend sessions regularly

Equipment List

Please find below a list of materials for A Level Biology

Equipment required for course –

Textbook
Ruler
Pencil
Sharpener
Rubber
Calculator
Notebook
Large binder

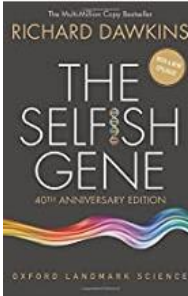
Reading lists & Texts

AQA Biology (A-Level) - Glenn and Susan Toole

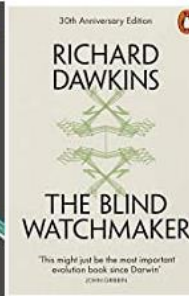


Richard Dawkins:

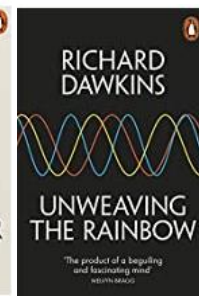
The Selfish Gene



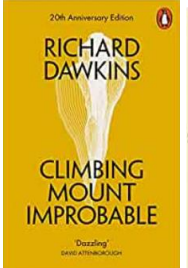
The Blind Watchmaker



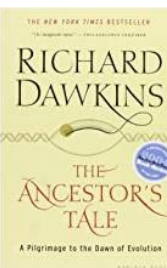
Unweaving the Rainbow



Climbing Mount Improbable

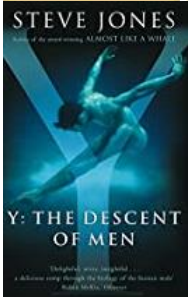


The Ancestor's Tale

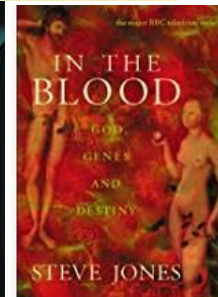


Steve Jones

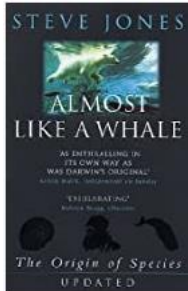
Y: The Descent of Men



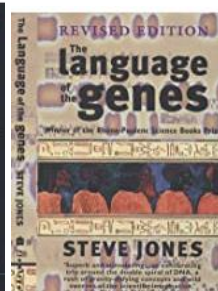
In the Blood: God, Genes and Destiny



Almost Like a Whale: The 'Origin of Species' Updated

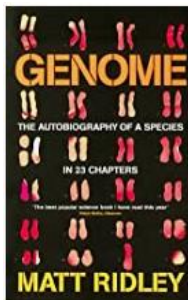


The language of the genes

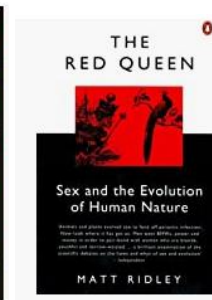


Matt Ridley

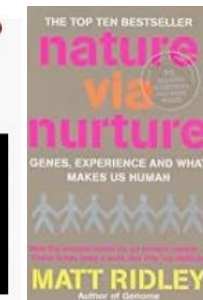
Genome: The Autobiography of a Species in 23 Chapters



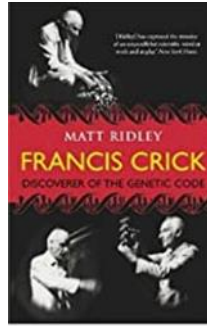
The Red Queen: Sex and the Evolution of Human Nature



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

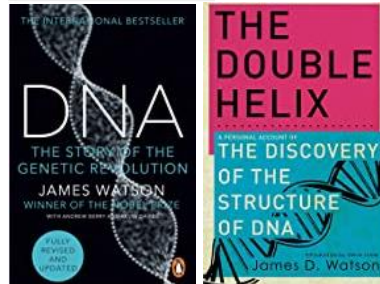


Francis Crick: Discoverer of the Genetic Code

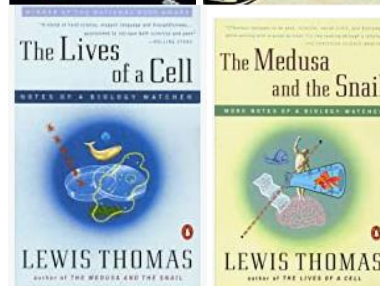


James Watson: DNA: The Secret of Life

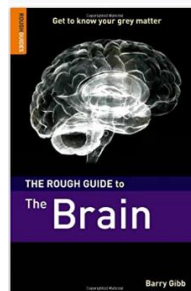
The Double Helix: Personal Account of the Discovery of the Structure of DNA



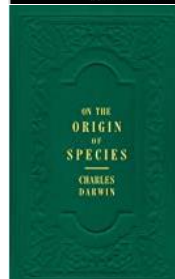
Lewis Thomas: The Lives of a Cell: Notes of a Biology Watcher. The Medusa and the Snail: More Notes of a Biology Watcher



Barry Gibb: The Rough Guide to the Brain



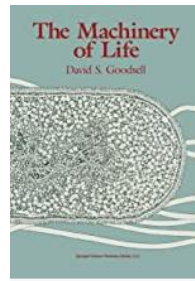
Charles Darwin: The origin of species



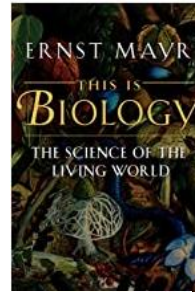
Armand Marie Leroi: Mutants: On the Form, Varieties and Errors of the Human Body



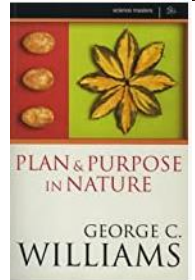
David S. Goodsell: The Machinery of Life



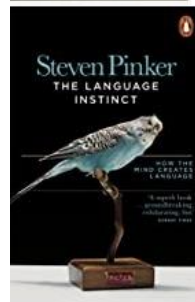
Ernst Mayr: This Is Biology: The Science of the Living World



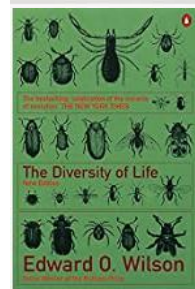
George C. Williams: Plan and Purpose in Nature



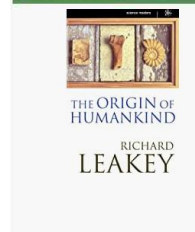
Steven Pinker: The Language Instinct



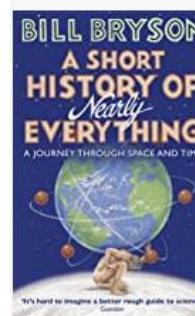
Edward O Wilson: The Diversity of Life



Richard Leakey: The Origin of Humankind



Bill Bryson: A Short History of Nearly Everything



Websites & Video links

1. <http://www.ibiblio.org/virtualcell/index.htm> – An interactive cell biology site
2. <http://www.accessexcellence.org/RC/VL/GG> – A web site showing illustrations of many processes of biotechnology
3. <http://www.uq.oz.au/nanoworld> – Visit the world of electron-microscopy
4. <http://www.dnai.org/a/index.html> – Explore the genetic code
5. <http://nobelprize.org> – Details of the history of the best scientific discoveries
6. <http://nature.com> – The site of the scientific journal
7. <http://royalsociety.org> – Podcasts, news and interviews with scientists about recent scientific developments
8. <http://www.nhm.ac.uk> – The London Natural History Museum's website with lots of interesting educational material
9. <http://www.bmj.com> – The website of the British Medical Journal
10. http://www.bbc.co.uk/news/science_and_environment The BBC news page for Science and the Environment

Transition Work

Over the holidays you will complete the following tasks and bring it with when you start in September.

Prepare to present (2-3 mins) a topic in Biology that interests you. You must have:

Why it interests you

Current information/study

How (and where) it links to the specification we are studying

References

An A4 summary on sheet below to submit (font size X12)