



BIOLOGY

Course: OCR Biology A-Level

INTRODUCTION

These pages contain a programme of activities and resources to prepare you to start A-Level in Biology in September. It is intended to be used after you complete your GCSE throughout the remainder of the summer term and over the summer holidays to ensure you are ready to start your course in September.

In Year 12 you will study

- Foundations in biology
- Exchange and transport
- Biodiversity, evolution and disease

In year 13 you will study

- Communication, homeostasis and energy
- Genetics, evolution and ecosystems

SPECIFICATION

<https://ocr.org.uk/Images/687834-download-a-level-specification.pdf>

TASK 1: MATHS SKILLS & TRANSITION TASKS

- <https://mmerevise.co.uk/app/uploads/2018/11/Maths-For-Biology-Questions-and-Answers-AQA-OCR-Edexcel.pdf> (Compulsory)
- [GCSE → A Level transition tasks - deadline September 2024](#) (Compulsory, deadline September 2024)
- <https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/biology/bbr72-head-start-to-a-level-biology-with> (Optional)

TASK 2: TASTER COURSES LINKED TO A-LEVEL BIOLOGY

Choose one that interests you and complete it. (Compulsory)

- <https://www.futurelearn.com/courses/physiology>
- <https://www.futurelearn.com/courses/the-biology-of-bugs-brains-and-beasts>
- <https://www.futurelearn.com/courses/biochemistry>
- <https://www.futurelearn.com/courses/what-drives-the-body>
- <https://www.futurelearn.com/courses/introduction-to-microbiology>
- <https://www.coursera.org/learn/genetics-evolution>
- <https://www.coursera.org/learn/physiology>
- <https://www.coursera.org/learn/plantknows>

All the following sections are optional

WHAT TO WATCH

Movie and box set recommendations

- Gorillas in the Mist (1988)
- Lorenzo's Oil (1992)
- Something the Lord Made (2004)
- Blue Planet
- Planet Earth
- The Ascent of Man
- Catastrophe
- Frozen Planet
- Life Story
- The Hunt and Monsoon

WHAT TO WATCH

Science Lectures

- **A New Superweapon in the Fight Against Cancer** <https://www.ted.com/talks/paula-hammond-a-new-superweapon-in-the-fight-against-cancer?language=en>
- **Why Bees are Disappearing** <http://www.ted.com/talks/marla-spivak-why-bees-are-disappearing?language=en>
- **Why Doctors Don't Know About the Drugs They Prescribe** <https://www.ted.com/talks/ben-goldacre-what-doctors-don-t-know-about-the-drugs-they-prescribe?language=en>
- **Growing New Organs** <http://www.ted.com/talks/anthony-atala-growing-organs-engineering-tissue?language=en>
- **Want to edit your DNA?** <https://www.ted.com/talks/nessa-carey-want-to-edit-your-dna>

WHO TO FOLLOW

- **Carl Zimmer** – science writer Carl Zimmer blogs about life sciences @carlzimmer
- **Maryn McKenna** – science journalist who writes about antibiotic resistance @marynmck
- **Nature** – the international journal of science @Nature
- **National Geographic** – since 1888, National Geographic has travelled the Earth, sharing amazing stories in pictures and in words @NatGeo
- **Teach Me Biology** – a revision podcast for A Level Biology students @teachmebiocast

WHAT TO READ

- Junk DNA by Nessa Carey
- A Short History of Nearly Everything by Bill Bryson
- Frankenstein's cat by Emily Anthes
- The Body: A Guide for Occupants by Bill Bryson
- Silent Spring by Rachel Carson
- Genome by Matt Ridley

USEFUL WEBSITES

- <https://www.dailymotion.com/video/xzh0kb>
- <https://www.rsb.org.uk/>
- <https://learn.genetics.utah.edu/>
- <https://www.zsl.org/what-we-do/conservation>
- <https://www.dnaftb.org/>

WHERE TO VISIT

- Royal Botanic Gardens – Kew
- Centre of the Cell – London
- Natural History Museum – London

QUERIES?

Please email the Head of Biology, Ms Pervez: biology@sacredh.lbhf.sch.uk