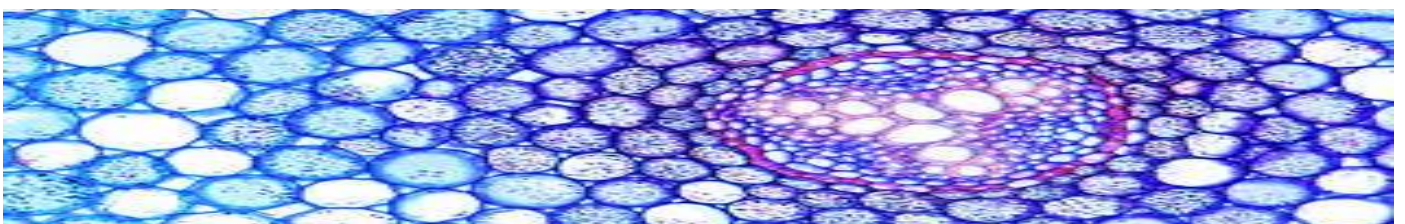
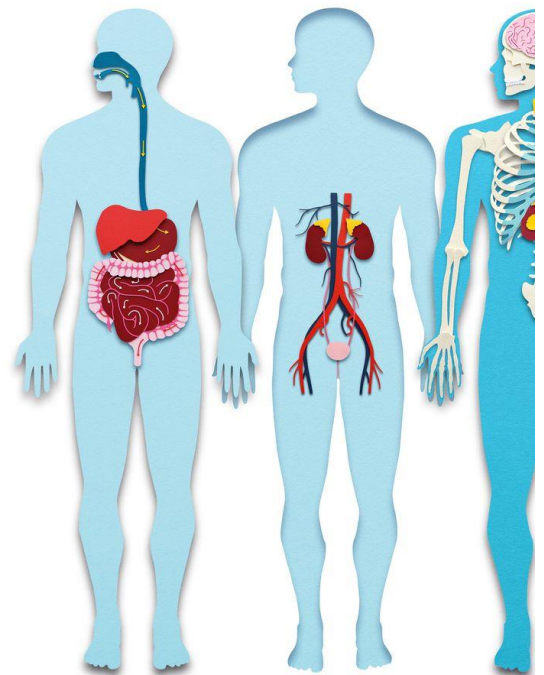
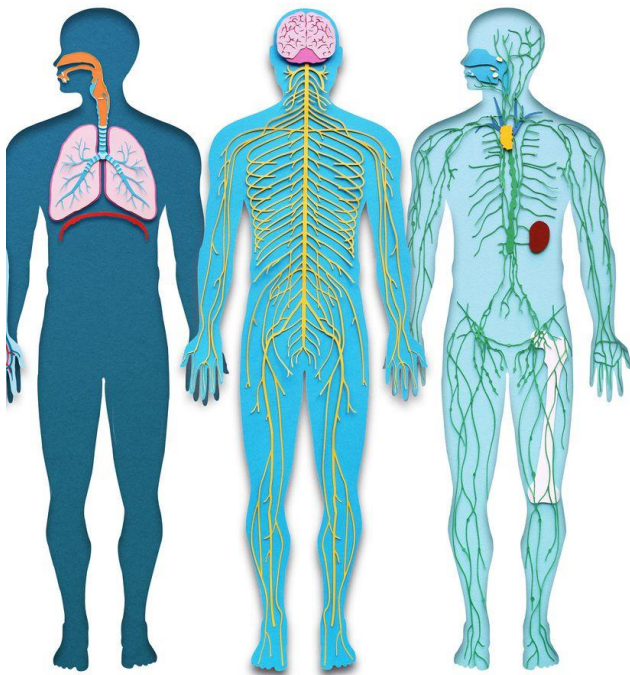




# A level

# Biology Transition Guide



# Welcome to A level Biology!

This booklet is a guide to prepare you for studying A level Biology in September. The activities and resources provided online will give you some practice at reviewing some of the core knowledge and skills required at A level Biology.

The study skills and suggested reading sections will allow you to gain insight into the essential study skills required and the importance of reading around the subject to extend your subject knowledge.

To be successful at A level Biology you will need to be organised, motivated and efficient with your study time.

## Study Skills

- **Learning Tool Box:** <http://coe.jmu.edu/learningtoolbox/studentstart.htm>  
This a great resource to help you understand and improve your organisation, study skills, note taking, thinking skills and test skills.
- **Hacking Knowledge:** <https://oedb.org/ilibrarian/hacking-knowledge/>  
There are 74 tips to help you to learn faster, deeper and better.

## Course Preparation Resources

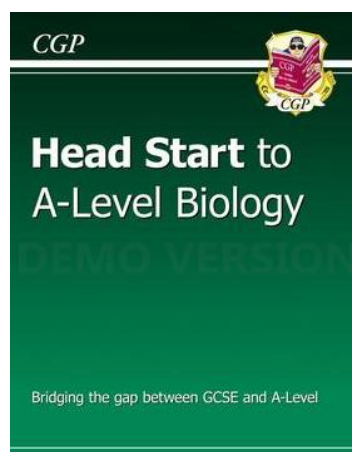
The course specification can be found from the following link. This specification covers the two-year course, which is written by the exam board OCR. Other resources such as exam questions, quizzes and activities can be found on this website as well.

Specification Code: H420

Course Name: Biology A

<https://www.ocr.org.uk/qualifications/as-and-a-level/biology-a-h020-h420-from-2015/>

The following resource we would advise you purchase.



Title: Head Start to A-Level Biology

Publisher: CGP

ISBN: 978-1782942795

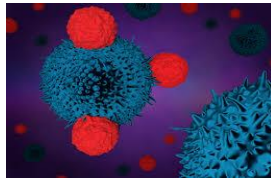
<https://www.amazon.co.uk/Head-Start-level-Biology-Level/dp/1782942793>

## **Video Clips - Worth a Watch!**

### ***'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#t-120178](https://www.ted.com/talks/paula_hammond_a_new_superweapon_in_the_fight_against_cancer?language=en#t-120178)

Cancer is a very clever, adaptable disease. To defeat it, says medical researcher and educator Paula Hammond, we need a new and powerful mode of attack. With her colleagues at MIT, Hammond engineered a nanoparticle one-hundredth the size of a human hair that can treat the most aggressive, drug-resistant cancers. Learn more about this molecular superweapon and join Hammond's quest to fight a disease that affects us all.



### ***'Why bees are disappearing?'***

[https://www.ted.com/talks/marla\\_spivak\\_why\\_bees\\_are\\_disappearing?language=en#t-3428](https://www.ted.com/talks/marla_spivak_why_bees_are_disappearing?language=en#t-3428)

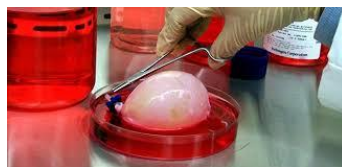
Honeybees have thrived for 50 million years, each colony 40 to 50,000 individuals coordinated in amazing harmony. So why, seven years ago, did colonies start dying en masse? Marla Spivak reveals four reasons which are interacting with tragic consequences. This is not simply a problem because bees pollinate a third of the world's crops. Could this incredible species be holding up a mirror for us?



### ***'Growing new organs'***

[https://www.ted.com/talks/anthony\\_atala\\_growing\\_new\\_organs?language=en](https://www.ted.com/talks/anthony_atala_growing_new_organs?language=en)

Anthony Atala's state-of-the-art lab grows human organs -- from muscles to blood vessels to bladders, and more. At TEDMED, he shows footage of his bio-engineers working with some of its sci-fi gizmos, including an oven-like bioreactor (preheat to 98.6 F) and a machine that "prints" human tissue.



### ***'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](https://www.ted.com/talks/ben_goldacre_what_doctors_don_t_know_about_the_drugs_they_prescribe?language=en)

When a new drug gets tested, the results of the trials should be published for the rest of the medical world -- except much of the time, negative or inconclusive findings go unreported, leaving doctors and researchers in the dark. In this impassioned talk, Ben Goldacre explains why these unreported instances of negative data are especially misleading and dangerous.



## Wider Reading

To help you develop your understanding of the subject, the following links will enable you to read around the subject to extend your knowledge and help you to deepen your love for Biology!

- **Biological Sciences Review**

<https://www.hoddereducation.co.uk/magazines/magazines-extras/biological-sciences-review-extras>

- **Big Picture :**

<https://www.stem.org.uk/big-picture/resource-collection>

- **New Scientist :**

<http://www.newscientist.com/>

- **Nature:**

<http://www.nature.com/>

- **BBC Science and Environment news:**

Keep up to date with science and environment news as it happens.

[http://www.bbc.co.uk/news/science\\_and\\_environment](http://www.bbc.co.uk/news/science_and_environment) or via the BBC News phone App.

- **BBC Health news.** This provides breaking news from the world of human health and can also be found on the BBC News App.

<http://www.bbc.co.uk/news/health>

- **Cells Alive.** Animations, images and interactives about cell biology.

<http://www.cellsalive.com>

- **DNA Interactive.** Video footage and animations that bring our understanding of DNA replication and expression to life.

<http://www.dnai.org/>

- **Learn.Genetics.** Animations and interactives that bring genetics, bioscience and health to life.

<http://learn.genetics.utah.edu>

The activities can be found on the online section of work on the Bishop Challoner Catholic College Website. Any problems, please email on

[s.mayor@bishopchalloner.bham.sch.uk](mailto:s.mayor@bishopchalloner.bham.sch.uk)