### St Bede's Catholic

### College

## Year 11 into 12 Transition Work

# Biology



Exam Board - OCR

Course Length - 2 Years

Link to the **specification** online <u>https://www.ocr.org.uk/qualifications/as-and-a-level/biology-a-h020-h420-from-2015/</u>

Biology A – Provides a flexible approach to teaching. The specification is divided into topics, each covering different key concepts of biology. Teaching of practical skills is integrated with the theoretical topics and they are assessed through the written papers. For A level only, the Practical Endorsement will also support the development of practical skills

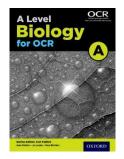
#### Exam structure

Content Overview	Assessment Overview	
<ul> <li>Content is split into six teaching modules:</li> <li>Module 1 – Development of practical skills in biology</li> </ul>	Biological processes (01) 100 marks 2 hour 15 minutes written paper	<b>37%</b> of total A level
<ul> <li>Module 2 – Foundations in biology</li> <li>Module 3 – Exchange and transport</li> <li>Module 4 – Biodiversity, evolution and disease</li> </ul>	Biological diversity (02) 100 marks 2 hour 15 minutes written paper	<b>37%</b> of total A level
<ul> <li>Module 5 – Communication, homeostasis and energy</li> <li>Module 6 – Genetics, evolution and ecosystems</li> <li>Component 01 assesses content from modules 1, 2, 3 and 5.</li> </ul>	Unified biology (03) 70 marks 1 hour 30 minutes written paper	<b>26%</b> of total A level
Component 02 assesses content from modules 1, 2, 4 and 6. Component 03 assesses content from all modules (1 to 6).	Practical Endorsement in biology (04) (non exam assessment)	Reported separately (see section 5f)

All components include synoptic assessment.

Link to sample/past papers: <u>https://www.ocr.org.uk/qualifications/as-and-a-level/biology-a-h020-h420-from-2015/assessment/</u>

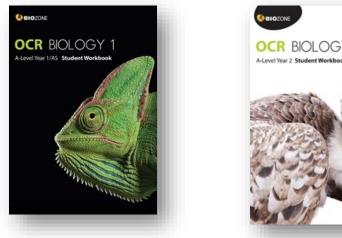
We subscribe to Kerboodle so you have access to online digital textbooks and resources.

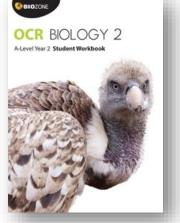


In addition, some students purchase these texts to support their learning:

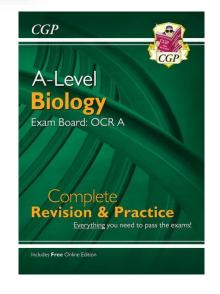


These are manuals that students can write in and answer Qs. They can be useful as HL resources and for extended detail.





The CGP revision book is also popular with students.



#### **Useful websites**

- <u>http://www.ibiblio.org/virtualcell/index.htm</u>
   <u>Apintergative apll biology site</u>
  - An interactive cell biology site
- <u>http://www.accessexcellence.org/RC/VL/GG</u>
   A web site showing illustrations of many processes of biotechnology
- <u>http://www.uq.oz.au/nanoworld</u>
   visit the world of electron-microscopy
- <u>http://www.dnai.org/a/index.htm</u>
   I Explore the genetic code
- <u>http://nobelprize.org</u>
  - o Details of the history of the best scientific discoveries
- <u>http://nature.com</u>
  - The site of the scientific journal
- <u>https://www.nature.com/scitable</u>
  - be inspired with resources on genetics and cell biology from Nature Publishing Group, home of Nature, the most cited scientific journal in the world.
- <u>http://royalsociety.org</u>
  - o Podcasts, news and interviews with scientists about recent scientific developments
- http://www.nhm.ac.uk
  - The London Natural History Museum's website with lots of interesting educational material
- <u>http://www.bmj.com</u>
  - The website of the British Medical Journal
- <a href="http://www.bbc.co.uk/news/science">http://www.bbc.co.uk/news/science</a> and environment
- The BBC news page for Science and the Environment

#### Transition work – there are 4 tasks to complete:

- 1. Seneca Learning: <u>https://app.senecalearning.com/classroom/course/76917ca0-ac10-43c9-8742-e49b861417b2</u>
  - They have set up GCSE refresher sessions covering five key areas of Biology. There are also four A Level taster learning sessions on the same link. Although it says for the AQA course the content covered is the same as for OCR module 2. Working through these tasks first will help you complete the transition booklet and prepare for studying A level Biology. For this task you can set up your own log in.
- 2. Oxford University Press A level Biology Transition worksheet: <u>http://fdslive.oup.com/www.oup.com/oxed/secondary/science/Science\_A\_Level\_</u> <u>Transition\_Pack\_Biology.pdf</u>
  - This covers key information on knowledge and skills needed for A level Biology. There are answers to the maths questions at the end so you can practice the important skills needed for the course.

- 3. Open University Course
  - As part of your 'bridging the gap' work you can complete one of the free courses available to you from The Open University. They offer an opportunity to understand the roles carried out by scientists and medical staff as well as finding our



carried out by scientists and medical staff as well as finding out more about a subject of interest to you.

- Please choose one of the introductory courses below.
- Once completed print out the certificate and bring it along to our first lesson as evidence.

#### What is the genome made of?

https://www.open.edu/openlearn/science-maths-technology/biology/what-the-genomemade/content-section-0?active-tab=description-tab

#### Water and human health

https://www.open.edu/openlearn/science-maths-technology/biology/water-and-humanhealth/content-section-0?active-tab=description-tab

#### Studying Mammals – Life in the trees

https://www.open.edu/openlearn/nature-environment/natural-history/studying-mammals-life-thetrees/content-section-0?active-tab=description-tab

#### Meiosis and mitosis

https://www.open.edu/openlearn/science-maths-technology/science/biology/meiosis-andmitosis/content-section-0?active-tab=description-tab

Histology, Microscopy, Anatomy and Disease

https://www.open.edu/openlearn/science-maths-technology/histology-microscopy-anatomyand-disease/content-section-overview?active-tab=description-tab

#### Gene Therapy

https://www.open.edu/openlearn/science-maths-technology/biology/genetherapy/content-section-0?active-tab=description-tab If you have any questions or require any further guidance, please contact

- Mrs Liew <u>c.liew@stbcc.org</u>
- Mrs Powers <u>h.powers@stbcc.org</u>
- Mrs Ford <u>c.ford@stbcc.org</u>
- Mrs Carmichael <u>r.carmichael@stbcc.org</u>

We look forward to welcoming you to A level Biology.