



Sir John Lawes School
Education for a changing world

Advanced Level Sciences

Biology





Entry Requirements

Are listed in the 6th form prospectus

If you are studying triple science:

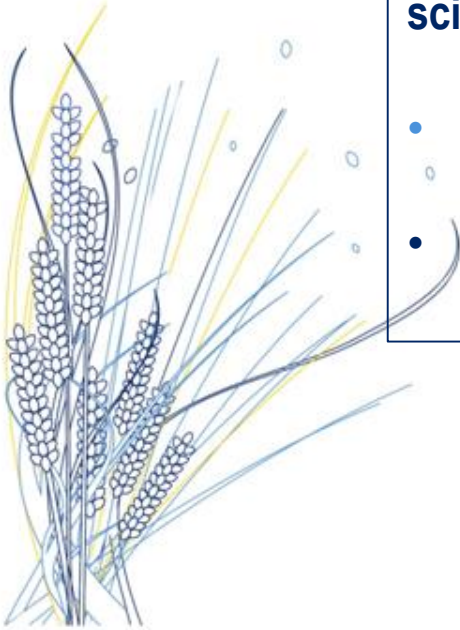
- **GCSE Triple Science Biology at grade 6 and above**
- **APS of 4.5 or above**

If you are studying combined science:

- **GCSE Combined Science at grade 7-6 and above**

AND

- **Grade 6 or above in GCSE Mathematics**
- **APS of 4.5 or above**





Expectations

A successful student will:

- Have a real interest in the subject and an enquiring mind about the world in which we live.
- Will be hard working, persevering and not afraid to ask for help.
- Will work steadily, keeping to deadlines.
- Has the ability to work independently to prepare for and consolidate the course content.





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Biology A: H420



Examined by OCR
Biology A (H420)
(If looking on the website - from 2015)



Course Materials

- **OCR A Level Textbook** – A comprehensive textbook of notes, questions and extended thinking tasks.
- **Practical Activity Sheets** – through practical work students can develop their understanding of biological concepts and improve their practical skills.





Year 12 Topics

- Cell structure, division, diversity
- Cell membranes and transport
- Biochemistry (including DNA and enzymes)
- Exchange surfaces and breathing
- Transport in plants and animals
- Immune system
- Biodiversity
- Classification and evolution





Year 13 Topics

- **Communication and homeostasis**
Including nervous communication, hormonal communication and excretion
- ***Plant and animal responses***
Including plant hormones, structure of the brain and reflexes and muscle structure and function
- ***Photosynthesis and respiration***
- ***Inheritance, DNA and genetic engineering***
- ***Cloning and biotechnology***
- ***Ecosystems and populations***





A Level Assessment

All assessment is at the end of Year 13:

3 Written papers

- Biological Processes (2hr 15min) 37%
- Biological Diversity (2hr 15min) 37%
- Unified Biology (1hr 30min) 26%





Practical Endorsement

- The completion of 12 assessed practical skills that are fundamental for a biologist to be able to use (carried out during normal lessons as part of the learning process). This will be reported on the certificate as **PASS/FAIL**. Exam papers will also contain questions about experimental procedures. Students will keep their results in a lab book.





Support

Pupils will find parts of the biology course challenging as there is a high level of content and understanding required.

However, we are there to support all the time:

- Bridging work set over the summer – to aid transition.
- After school sessions to do extra practical work or consolidation.
- Monitoring and feedback for improvement.
- Work set around pupils' individual needs.
- Wide range of additional resources, along with lesson power-points, worksheets and extension resources available each week on the student shared area.
- Early interventions between students, form tutor and parents with support programmes put into place.





Subject Choice

It is a key subject for many STEM Careers:

- Nursing, dentistry, forensic science, physiotherapy, botany, environmental science, biological sciences, zoology, geology, pharmaceuticals, energy, teaching, science writing, genetics and research.
- Biology is highly recommended for Medicine or Veterinary Science.
- It can be an advantage to study two science subjects at A level.
- Studying Maths will also support Biology but is not essential.





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More information.....

School Website

www.sjl.herts.sch.uk

Exam Board Website

www.ocr.org.uk

