



## Ursuline High School & Wimbledon College Sixth Form

## BIOLOGY

at Ursuline High School

LEVEL: A-level

#### EXAMINATION BOARD: AQA

SPECIFICATION NUMBERS: 7402

September 2021

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# A-level Biology

Biology A-level will give you the skills to make connections and associations with all living things around you. Biology literally means the study of life and if that's not important, what is? Being such a broad topic, you're bound to find a specific area of

interest, plus it opens the door to a fantastic range of interesting careers.

#### Possible degree options

degree courses taken by students who have an

A-level in Biology are:

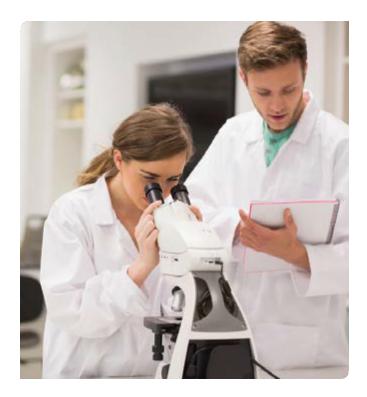
- Biology
- Psychology
- · Sport and exercise science
- Medicine
- Anatomy
- Physiology and Pathology Pharmacology
- Toxicology and Pharmacy Chemistry.

According to bestcourse4me.com, the top seven

### Possible careeroptions

Studying A-level Biology at university gives you all sorts of exciting career options, including:

- Doctor
- Clinical molecular geneticist
- Nature conservation officer
- Pharmacologist
- Research scientist
- Vet
- Secondary school teacher
- Marine biologist
- Dentist.



#### Topics covered

A-level Biology lasts two years, with exams at the end of the second year. The table below shows the topics you will study in each year.

AS and first year	Second year of	
of	A-level	
<ol> <li>Biological molecules</li> <li>Cells</li> <li>Organisms exchange substances with their environment</li> <li>Genetic information, variation and relationships between organisms</li> </ol>	<ol> <li>Energy transfers in and between organisms</li> <li>Organisms respond to changes in their internal and external environments</li> <li>Genetics, populatio ns,</li> </ol>	

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#### Practical's

Biology, like all sciences, is a practical subject. Throughout the course you will carry out practical activities including:

- using microscopes to see cell division
- dissection of animal or plant systemsaseptic technique to study microbial
- growth
- investigating activity within cells
- investigating animal behaviours
- investigating distributions of species in the environment.

These practical's will give you the skills and confidence needed to investigate the way living things behave and work. It will also ensure that if you choose to study a Biologybased subject at university, you'll have the practical skills needed to carry out successful experiments in your degree.

#### Exams

Paper 1	There is no coursew However, your perfo practical's will be as practical endorseme	ıg	
2	There are three exa two years for A-leve hours long. At least A-level Biology are to learned in your prace		
3	Any content from topics 1-8, including relevant practical skills.	38 marks: structured questions, including practical techniques. 15 marks: critical analysis of experimental data. 25 marks: one essay from a choice of 2 titles.	30%

Other subject's biology goes well with: Chemistry, Math's, Psychology, Geography, PE and Physics

"Science is beautiful when it makes simple explanations of phenomena or connections between different observations. Examples include the double helix in biology and the fundamental equations of physics." Stephen Hawking

Useful links: <u>http://www.aqa.org.uk/biology-guide</u>

Recommended Reading: The New Scientist, BBC wildlife, National Geographic and Nature

#### **ENTRY CRITERIA**

Please refer to the Entry Criteria Insert to understand the Pathway requirements.

The entry criteria for this subject is: Grade 6 in Biology OR Grade 7 in Combined Science, AND Grade 6 in Maths