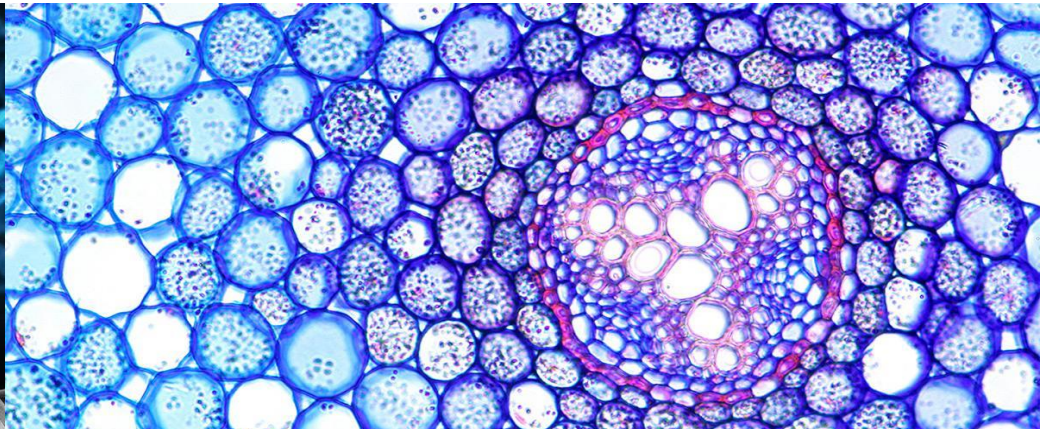


# INTRODUCTION TO BIOLOGY A LEVEL



# STRUCTURE

This is a **two year A Level course**.

You will have 10 lessons per fortnight with two teachers.

**3 Examinations** will be sat in June/July of Year 13.

There is NO coursework.

**12 Required Practicals (PAGs)** (as a minimum) will be completed throughout the course. You will be assessed on these practicals and the outcome of this will feed into the **Practical Endorsement** qualification.

Content Overview	Assessment Overview	
Content is split into six teaching modules: <ul style="list-style-type: none"><li>• Module 1 – Development of practical skills in biology</li><li>• Module 2 – Foundations in biology</li><li>• Module 3 – Exchange and transport</li><li>• Module 4 – Biodiversity, evolution and disease</li><li>• Module 5 – Communication, homeostasis and energy</li><li>• Module 6 – Genetics, evolution and ecosystems</li></ul> Component 01 assesses content from modules 1, 2, 3 and 5. Component 02 assesses content from modules 1, 2, 4 and 6. Component 03 assesses content from all modules (1 to 6).	Biological processes (01) 100 marks 2 hour 15 minutes written paper	<b>37%</b> of total A level
	Biological diversity (02) 100 marks 2 hour 15 minutes written paper	<b>37%</b> of total A level
	Unified biology (03) 70 marks 1 hour 30 minutes written paper	<b>26%</b> of total A level
	Practical Endorsement in biology (04) (non exam assessment)	<b>Reported separately</b> (see section 5f)

# TOPICS IN YEAR 12

## MODULES 1-2-3-4

- Cell Structure (organelles and Microscopes)
- Biological Molecules (macromolecules and biochemistry)
- Nucleotides and Nucleic Acids (DNA and protein synthesis)
- Enzymes (action and reaction)
- Biological Membranes (transport across membranes)
- Cell Division and Cellular Organisation (mitosis and meiosis)

- Exchange and Transport (gas exchange)
- Transport in Animals (circulatory system)
- Transport in Plants (transpiration and translocation)
- Disease and Immune System (pathogens, immunity and vaccinations)
- Biodiversity
- Classification and Evolution
- **Practical skills**

# TOPICS IN YEAR 13

## MODULES 5-6

- Communication and Homeostasis
- Excretion (Kidney and Liver)
- Neural Communication (nervous impulse and transmission)
- Hormonal Communication (the Pancreas and Endocrine system)
- Plant and Animal Responses (plant hormones, the Brain, reflex actions and muscles)
- Photosynthesis
- Respiration

- Cellular Control (genes and mutation)
- Patterns of Inheritance
- Manipulating Genomes (DNA sequencing, PCR and GE)
- Cloning and Biotechnology
- Ecosystems
- Populations and Sustainability

# HOW YOU WILL BE ASSESSED

After the completion of every unit you will sit an end of unit assessment. These can occur quite frequently (usually fortnightly). Each assessment will be a minimum of one hour long.

Every time you do a practical you will be assessed on your competency and skills. You will be required to answer questions about the practical after completion. Both skills and correct answers are required for the Practical Endorsement qualification. This component is awarded by your teachers at the end of the taught course.

You will sit two Year 12 mock papers in June of Year 12.

You will sit three papers at the end of Year 13. These will contribute to the Biology A Level Grade that you are awarded in August.

See the Assessment Overview on slide 2 for weighting and length of each examination.

