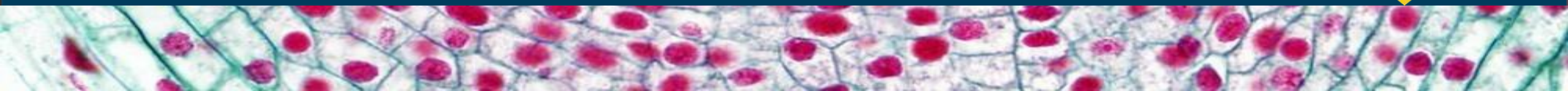


Biology A Level



Biology A Level

Mrs
Jabbal



Mrs Gosling



Mrs Grant



Miss Matthews



Course Details

Course Name:
A Level Biology
Exam Board: OCR



Course Outline



- Module 1 - Development of Practical skills
- Module 2 - Foundations in Biology
- Module 3 - Exchange and Transport
- Module 4 - Biodiversity, evolution and disease
- Module 5 - Communication, homeostasis & energy
- Module 6 - Genetics, evolution and ecosystems



Module 1: Development of practical skills

- ▶ 1.2.1 Practical skills (written paper)
 - ▶ Independent thinking
 - ▶ Use and application of scientific methods and practices
 - ▶ Research and referencing
 - ▶ Instruments and equipment
- ▶ 1.2.2 Use of apparatus and techniques (practical endorsement minimum of 12 practicals)
 - ▶ E.g. microscopes
 - ▶ Safe and ethical use of organisms
 - ▶ Aseptic techniques
 - ▶ Dissections
 - ▶ Sampling in fieldwork
 - ▶ ICT computer modelling/data logging



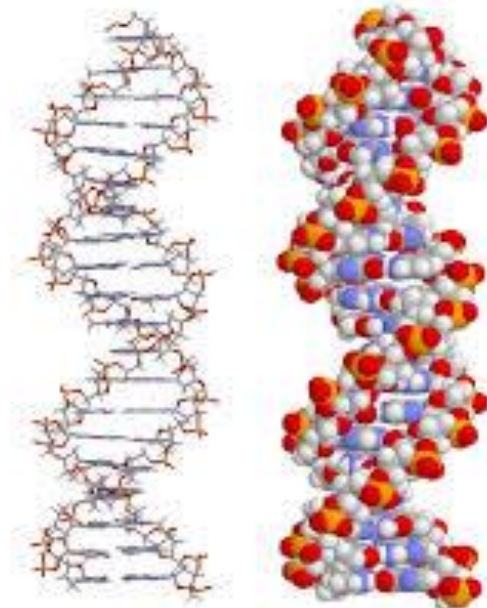
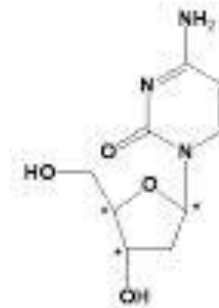
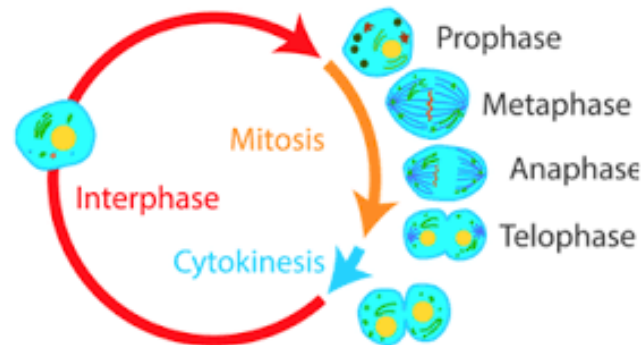
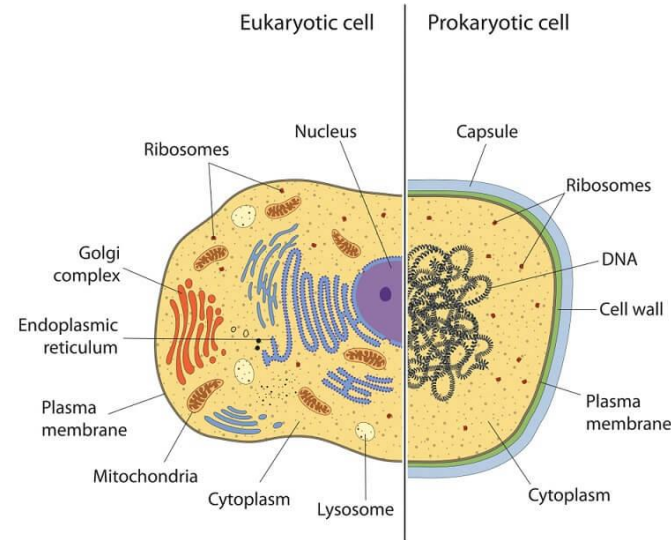
Practical Skills- What is assessed?



Common Practical Assessment Criteria	(1) Follows written procedures
	(2) Applies investigative approaches and methods when using instruments and equipment
	(3) Safely uses a range of practical equipment and materials
	(4) Makes and records observations
	(5) Researches, references and reports

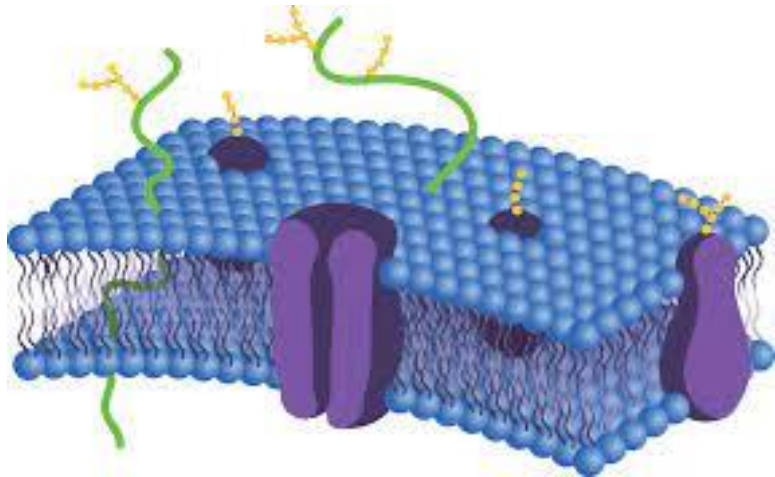
Module 2: Foundations in Biology

- ▶ Cell Structure
- ▶ Biological Molecules
- ▶ Nucleotides and Nucleic Acids
- ▶ Enzymes
- ▶ Biological Membranes
- ▶ Cell Division, Cell Diversity and Cellular Organisation



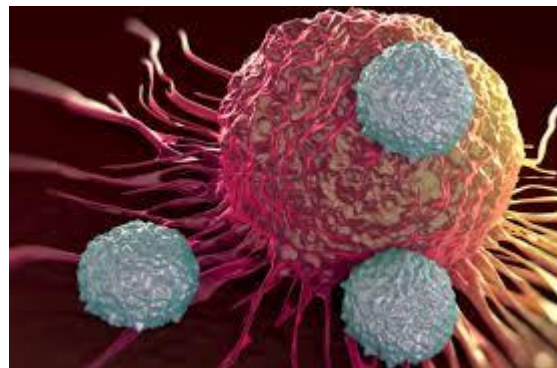
Module 3: Exchange and Transport

- ▶ Exchange Surfaces
- ▶ Transport in animals
- ▶ Transport in plants



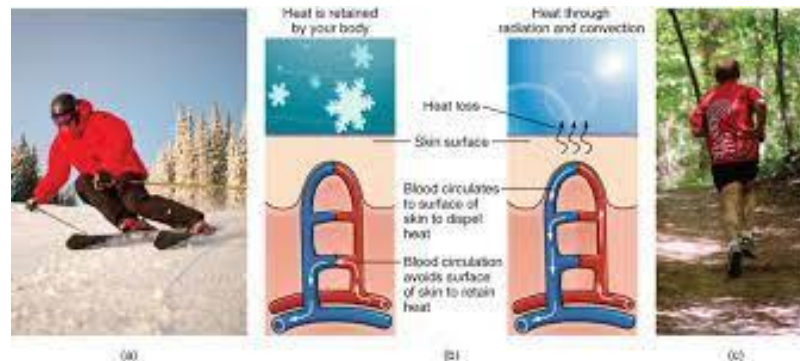
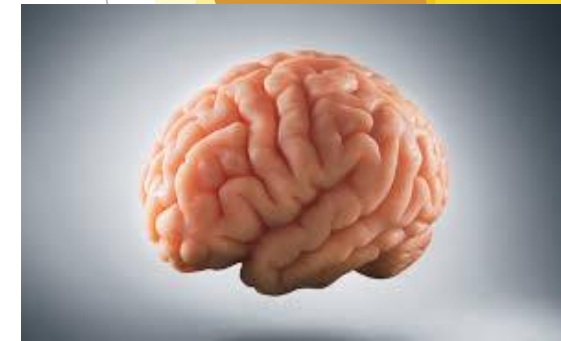
Module 4 Biodiversity, Evolution and disease

- ▶ Communicable diseases disease prevention and the immune system
- ▶ Biodiversity
- ▶ Classification and evolution



Module 5: Communication, Homeostasis ~ and Energy

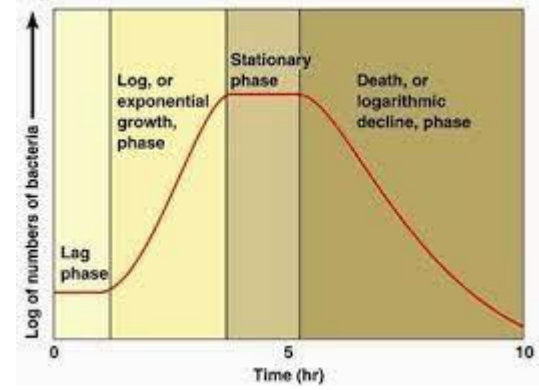
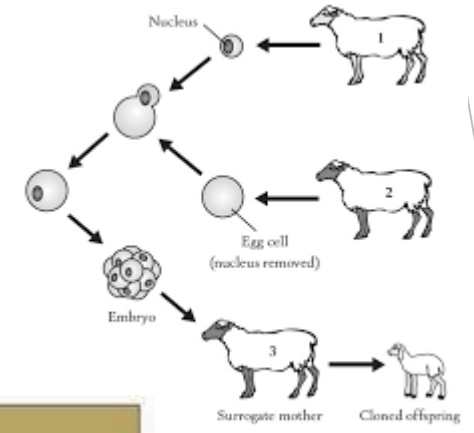
- ▶ Communication and Homeostasis
- ▶ Excretion as an example of homeostatic control
- ▶ Neuronal communication
- ▶ Hormonal communication
- ▶ Plant and animal responses
- ▶ Photosynthesis
- ▶ Respiration



Module 6: Genetics, Evolution and Ecosystems



- ▶ Cellular Control
- ▶ Patterns of Inheritance
- ▶ Manipulating Genomes
- ▶ Cloning and Biotechnology
- ▶ Ecosystems
- ▶ Populations and Sustainability



Essential Course Details



Paper	Component	Marks	Assesses content from modules	Duration	Weighting
1	Biological processes	100	1 2 3 5	2hr 15min	37%
2	Biological diversity	100	1 2 4 6	2hr 15min	37%
3	Unified Biology	70	1 2 3 4 5 6	1hr 30min	26%
4	Practical endorsement	Non exam assessment		-	Pass/Fail

Range of activities

- ▶ Practical Biology
- ▶ Supporting theory, practising skills
- ▶ Research skills
- ▶ Independent work, collaborative work
- ▶ Presentation skills
- ▶ Work as a team or individual, present research project
- ▶ Modelling
- ▶ Application of principles
- ▶ Ecological investigations



Why choose Biology?

Biology is useful entry into:

- ▶ Any biological sciences e.g. biochemistry, physiology, zoology, marine biology, botany anatomy, genetics, biotechnology, pharmacology
- ▶ Medical sciences e.g. Pharmacy, medicine, dentistry, pathology
- ▶ Sport sciences
- ▶ Psychology or Sociology
- ▶ Other pure science e.g. Physics, Chemistry
- ▶ Applied sciences e.g. Forensics, Archaeology
- ▶ Environmental Sciences.

and much more!



Results



2024	100% A*-E	56% A*-C
2023	92% A*-E	42% A*-C
2022	92% A*-E	48% A*-C
2021	100% A*-E	65% A*-C
2020	100% A*-E	91% A*-C
2019	93% A*-E	65% A*-C

Entry Requirements

7, 6 in Combined Science
Or
7 in Biology.

Must also have at least a grade 5 in Mathematics and English.

****Note****

To study two A level Sciences, you will need a grade 7,7 on combined sciences.

To study three A level Sciences, you will need a grade of 8,7 on combined sciences.

