

# Access to H.E. National Programme Unit



Unit Title:	The Cell		
Graded Unit Code:	GA33BIO08	Ungraded Unit Code:	UA33BIO08
Pathway(s):	Health Science and Engineering		
Module(s):	Human Biology Biology		
Level:	3	Credit Value:	3
Valid from:	31 <sup>st</sup> July 2021	Valid to:	31 <sup>st</sup> July 2026

**The following QAA grade descriptors must be applied if you are delivering the graded version of this unit:**

1	Understanding of the subject
2	Application of knowledge
5	Communication and presentation
7	Quality

LEARNING OUTCOMES	ASSESSMENT CRITERIA
<b>The learner will:</b>	<b>The learner can:</b>
1. Understand the structure of cells as revealed by light and electron microscopes	1.1 Identify the main components of plant and animal cells as seen using the light and electron microscope
	1.2 Compare the features of light and electron microscopy in terms of specimen preparation, illumination, image formation, magnification and resolution
	1.3 Identify organelles from electron-micrographs and diagrammatic representations

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	1.4 Describe the function of a range of cell organelles as observed using the electron microscope
2. Understand how the function of the plasma membrane is related to its structure	2.1 Relate the arrangement of phospholipid and protein in the plasma membrane (unit membrane) to properties of these molecules
	2.2 Compare ways in which molecules, liquids and solids cross the plasma membrane and relate these to the structure of the membrane and activity in the cell
	2.3 Interpret data relating to transport of molecules across cell membrane
3. Understand the importance of cell division	3.1 Compare and contrast the stages and products of mitosis and meiosis
	3.2 Explain the fate of cells produced by mitosis and by meiosis in humans