

PCHS Curriculum Information – Year 12 AAQ Human Biology

Course Title: AAQ Advanced National in Human Biology	Exam Board: Cambridge OCR	Specification Code: Extended Certificate H149
How will students be assessed? OCR Level 3 Alternative Academic Qualification Cambridge Advanced National in Human Biology (Extended Certificate) For this qualification, students must complete six units: • Two mandatory externally assessed units • Two mandatory NEA units • Two optional NEA units Year 12: F170 Fundamentals of human biology – Mandatory exam unit F171 Health and disease – Mandatory exam unit F172 Genetics – Mandatory coursework unit Year 13: F173 Biomedical techniques – Mandatory coursework unit The following optional units have been chosen: F174 Nutrition and metabolism F175 Human reproduction		

F170: Fundamentals of human biology In this unit you will learn about the key topics that are important in human biology. Topics include: • Topic Area 1 Human cells and tissues • Topic Area 2 Human physiology, organs and systems • Topic Area 3 Key concepts	F171: Health and disease In this unit you will learn about the intriguing and challenging nature of diseases and disorders. Topics include: • Topic Area 1 Causes and effects of diseases and disorders • Topic Area 2 Curative management and preventative therapies	F172: Genetics In this unit you will build on knowledge of DNA, cell division and inheritance from Unit F170 Fundamentals of human biology. You will learn • how to apply and use mathematical techniques to determine the probability of inheritance in human genetic disorders
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in endocrinology, neurobiology and reproduction • Topic Area 4 Basics of microbiology	• Topic Area 3 The role of immunology • Topic Area 4 Techniques for diagnosis and monitoring • Topic Area 5 Reporting, research and confidentiality	• learn the principles of genetic testing, how it is used and the importance of genetic counsellors. • how to investigate recent advances in gene therapy and genetic engineering, and the potential importance of these technologies in the future.
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Half Term	Key Content		
	Teacher 1:	Teacher 2:	Teacher 3:
1	F170 Fundamentals of Human Biology Topic 4: Basics of microbiology Topic 3: Key concepts in endocrinology, neurobiology and reproduction (3.2, 3.3)	F170 Fundamentals of Human Biology Topic: 2 Human physiology, organs and systems Topic 3: Key concepts in endocrinology, neurobiology and reproduction (3.1)	F170 Fundamentals of Human Biology Topic 1: Human cells and tissues Topic 3: Key concepts in endocrinology, neurobiology and reproduction (3.2)
2	F170 Fundamentals of Human Biology Topic 4: Basics of microbiology Topic 3: Key concepts in endocrinology, neurobiology and reproduction (3.2, 3.3) Prepare for exam January 2027	F170 Fundamentals of Human Biology Topic: 2 Human physiology, organs and systems Topic 3: Key concepts in endocrinology, neurobiology and reproduction (3.1) Prepare for exam January 2027	F170 Fundamentals of Human Biology Topic 1: Human cells and tissues Topic 3: Key concepts in endocrinology, neurobiology and reproduction (3.2) Prepare for exam January 2027
3	F172: Genetics Topic Area 4: Gene therapy and genetic engineering NEA coursework	F172: Genetics Topic Area 1: Fundamentals of genetics Topic Area 2: Mode of inheritance NEA coursework	F172: Genetics Topic Area 4: Gene therapy and genetic engineering NEA coursework
4	F172: Genetics Topic Area 4: Gene therapy and genetic engineering NEA coursework Task 2	F172: Genetics Topic Area 1: Fundamentals of genetics Topic Area 2: Mode of inheritance NEA coursework Task 1	F172: Genetics Topic Area 3: Genetic counselling NEA coursework Task 3
5	Unit F171: Health and disease	Unit F171: Health and disease	Unit F171: Health and disease

	Topic Area 1.3 The nature of communicable diseases Topic Area 2 Curative management and preventative therapies Topic Area 3 The role of immunology	Topic Area 1 Causes and effects of diseases and disorders Topic Area 3 The role of immunology	Topic Area 4 Techniques for diagnosis and monitoring Topic Area 5 Reporting, research and confidentiality
6	Unit F171: Health and disease Topic Area 1.3 The nature of communicable diseases Topic Area 2 Curative management and preventative therapies Topic Area 3 The role of immunology	Unit F171: Health and disease Topic Area 1 Causes and effects of diseases and disorders Topic Area 3 The role of immunology	Unit F171: Health and disease Topic Area 4 Techniques for diagnosis and monitoring Topic Area 5 Reporting, research and confidentiality