



Scheme of Learning

Curriculum area: PE

Key Stage: 4

Unit/Topic Title: GCSE Components 1 & 2

Topic 1 - Applied Anatomy and Physiology (Paper 1: Fitness and Body Systems)				
Week	Topic	Content	Prior Learning	Resources
	<p>Cardiovascular system – function applied to performance in physical activities</p> <p>Structure of the cardiovascular system applied to performance in physical activities</p>	<p>Transport of oxygen, carbon dioxide and nutrients, clotting of open wounds, regulation of body temperature</p> <p>Atria, ventricles, septum, tricuspid, bicuspid and semi-lunar valves, aorta, vena cava, pulmonary artery, pulmonary vein, and their role in maintaining blood circulation during performance in physical activity and sport</p>	<p>Students should know the basic reasons why heart rate increases with exercise.</p> <p>Students know the location of the heart.</p>	<p>Applied Anatomy and Physiology Topic Guide, activity 7</p> <p>Diagram of heart – learners to annotate</p> <p>CV System explained www.youtube.com/watch?v=CRjpWWuDNzI&feature=youtu.be&t=4</p>

GCSE Physical Education 2016: Scheme of learning



Wood Green Academy
AND SIXTH FORM CENTRE

<p>Cardiovascular system – arteries, capillaries and veins</p>	<p>Structure of arteries, capillaries and veins and how this relates to function and importance during physical activity and sport in terms of: blood pressure; oxygenated; deoxygenated blood and changes due to physical exercise</p>	<p>Students maybe aware of the basic journey of blood around the body with guidance.</p> <p>With support students should be able to identify the role of oxygenated and deoxygenated blood</p>	<p>Diagrams of differences between blood vessels – learners to annotate Article about blood vessels www.bbc.com/bitesize/guides/z9n6sg8/revision/2</p>
<p>Cardiovascular system – vascular shunting</p>	<p>The mechanisms required (vasoconstriction, vasodilation) and the need for redistribution of blood flow (vascular shunting) during physical activities compared to when resting</p>	<p>With guidance students should be aware of the redirection of blood.</p>	<p>Applied Anatomy and Physiology Topic Guide, activity 8</p>
<p>Cardiovascular system – function and importance of components of blood for</p>	<p>Red and white blood cells, platelets and plasma</p>	<p>Knowledge that red blood cells carry oxygen.</p>	<p>Scenario cards, 'what would happen if...' 'A day in the life of a red blood cell'</p>



physical activity and sport			www.youtube.com/watch?v=4GUYdaM3QIY
Respiratory system – composition of air	Composition of inhaled and exhaled air and the difference between the two at rest and when exercising	Be aware of the relationship between the CV system and respiratory system (oxygenated/deoxygenated blood). Difference between inhaling and exhaling.	Applied Anatomy and Physiology Topic Guide, activity 9 Introduction to the respiratory system www.youtube.com/watch?v=hc1YtXc_84A
Respiratory system – location of main components and the role in movement of oxygen and carbon dioxide into and out of the body	Lungs, bronchi, bronchioles, alveoli, diaphragm	Identification of the lungs and basic role.	Diagrams of respiratory system – learners to annotate
Respiratory system – structure and function of alveoli	Structure of alveoli Process of gas exchange Impact of varying intensities of exercise	Difference between aerobic and anaerobic activities. Knowledge of structure of	Diagrams of enlarged alveoli to allow learners to annotate what happens during gas exchange Gaseous exchange video www.youtube.com/watch?v=XTMYSGXhJ4E



	(aerobic and anaerobic)	respiratory system.	<p><u>Gaseous exchange Flip task –</u> https://www.youtube.com/watch?v=RxprXjSybhI&t=53s</p> <p>Article aerobic respiration www.bbc.com/bitesize/guides/zm6rd2p/revision/1</p> <p>Article anaerobic respiration www.bbc.com/bitesize/guides/zm6rd2p/revision/2</p>
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