

# Unit 24: Anatomy and Physiology: Cardiovascular, Lymphatic and Respiratory Systems

<b>Level:</b>	<b>2</b>
<b>Unit type:</b>	<b>Mandatory (General/Cardiac Physiology)</b>
<b>Credit value:</b>	<b>3</b>
<b>Guided learning hours:</b>	<b>23</b>

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## Unit summary

This unit aims to give learners an understanding of the anatomy and physiology of the cardiovascular, lymphatic and respiratory systems, and the range of healthcare science services used in the diagnosis, treatment and monitoring of diseases of these systems.

## Unit assessment requirements

Assessment tasks and activities must enable learners to produce valid, sufficient, authentic, and appropriate evidence that relates directly to the learning outcomes and assessment criteria of the unit. Suitable forms of evidence for this unit include:

- written tasks such as reports, articles for journals, newsletters, leaflets, posters
- workbooks, work logbooks or learner diaries
- written or oral presentations
- projects
- oral question and answer.

Observation records should not be used as the primary evidence of achievement for this unit, but can be used to supplement the more appropriate forms of evidence listed above or to provide sector contextualisation or evidence of how the learner has applied knowledge within their job role.

When devising the assessment activities, centres need to look closely at the verb used in each assessment criterion to ensure that learners can provide evidence with sufficient breadth and depth to meet the requirements. Centres need to produce assessment briefs for learners with clear instructions of what they are required to do.

## Learning outcomes and assessment criteria

To pass this unit, learners need to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements that the learner is expected to meet to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand anatomy and physiology of the blood and blood vessels	1.1	State the types of blood cells			
		1.2	Describe the formation of blood cells			
		1.3	Explain the process of clotting, including the role of platelets			
		1.4	Describe the structure and function of blood vessels			
		1.5	State factors that can affect blood flow			
		1.6	Describe a common disease of the blood			
		1.7	Describe a common disease of blood vessels and how it might affect a patient			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Understand anatomy and physiology of the heart	2.1	Describe the structure and function of the heart, including cardiac muscle tissue			
		2.2	State the heart valves			
		2.3	Describe the function of the heart valves			
		2.4	Describe the cardiac cycle			
		2.5	Describe the cardiac conduction system			
		2.6	Explain the term cardiac output			
		2.7	Describe a common disease of the heart and how it might affect a patient			
3	Understand the function of the lymphatic and immune system	3.1	Describe the function of the lymphatic and immune system			
		3.2	Describe the formation and flow of lymph			
		3.3	Describe a common disease of the lymphatic or immune system and how it might affect a patient			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Understand the anatomy and physiology of the respiratory system	4.1	Describe the structure and functions of the respiratory system			
		4.2	Explain diffusion in gaseous exchange			
		4.3	Describe a disease of the respiratory system and how it might affect a patient			
5	Understand the range of healthcare science services and their role in the diagnosis and treatment and monitoring of diseases of the cardiovascular, respiratory and lymphatic systems	5.1	Describe the routine tests undertaken by healthcare science services in investigating patients with disorders of: <ul style="list-style-type: none"> <li>• the cardiovascular systems</li> <li>• the lymphatic system</li> <li>• respiration and sleep</li> </ul>			
		5.2	State the role of the healthcare science workforce in supporting patients to modify their lifestyle			
		5.3	State the role of the healthcare science workforce in the treatment and monitoring of disease			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

*(if sampled)*