Unit 51: Introduction to Laboratory Practice

Level:	**2**
Unit type:	**Optional (Life Sciences)**
Credit value:	**2**
Guided learning hours:	**13**

Unit summary

This unit aims to give learners the understanding and skills they need to work safely in the laboratory and in the cryopreservation facility. Learners will learn how to communicate with the laboratory and with the wider multi-disciplinary team.

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 is only suitable for assessment criteria that require learners to demonstrate skills and behaviours; in this unit AC2.1 and AC2.2.

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.

Additional information

Equipment for AC5.1, AC5.2, AC5.3 and AC5.4 includes:

- Biological Safety Cabinet
- Centrifuge
- Incubator
- Microscope.

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 how Standard Operating Procedures ensure a safe working environment in the laboratory	1.1	Explain how Standard Operating Procedures are structured, how to access them, and the importance of their use			
		1.2	Describe how the security of the laboratory is ensured			
		1.3	Describe the clothing policy for the different areas within the laboratory			
		1.4	State the requirements for air quality for different areas within the laboratory			
		1.5	Explain how the environment is maintained, including cleaning, movement of stock, waste disposal			
		1.6	Outline the types of cleaning products and describe their appropriate use within the laboratory			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Be able to work safely in the laboratory	2.1	Work safely at all times, complying with health and safety and other relevant regulations and guidelines			
		2.2	Select appropriate cleaning products to use within the laboratory			
3	Understand the key components of Quality Management	3.1	Describe the requirements for Quality Management			
		3.2	Explain the methods used to track the use of laboratory equipment			
		3.3	Explain the methods used to track the use of laboratory consumables			
		3.4	Explain the methods used to track the status of the laboratory environment			
		3.5	Describe the daily monitoring tasks for laboratory and their purpose			
		3.6	Explain how audit procedures are used in own laboratory			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Understand the use and maintenance of the specialist equipment	4.1	Describe the function and types of equipment in your laboratory			
		4.2	Describe how to clean the equipment			
		4.3	Describe the routine checks that are performed on the equipment			
		4.4	Describe the safety features of the equipment			
		4.5	Describe where to find the manuals for the equipment used in own laboratory			
5	Be able to communicate within the laboratory and wider multi-disciplinary team	5.1	Define the communication methods used in the context of delivery of services internally and with external agencies			
		5.2	List tasks which require the use of effective communication			
		5.3	Communicate within the laboratory and wider multi-disciplinary team			
		5.4	Outline the potential effects of poor communication on the patient and laboratory services			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
6	Understand the limits of own role within the healthcare science laboratory	6.1	Explain the role of the Healthcare Science Assistant in the laboratory			
		6.2	Describe the limits of the learner's own authority and to whom they should report if they encounter problems that they cannot resolve			
		6.3	Describe how to report an incident and understand the process of incident reporting at both local and national level			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)