Unit 37: Microbiology in Practice

Level: 4

Unit type: Optional (Laboratory Science)

Credit value: 30

Guided learning hours: 240

Unit summary

In this unit, you will apply the knowledge and skills that you gained in *Unit 19: General Laboratory Practice* to work in a microbiology setting. You will be required to demonstrate appropriate attitudes and behaviours, and to integrate your learning as you develop your professional practice.

Unit assessment requirements

There are no specific assessment requirements for this unit, however **learners completing this unit must also complete *Unit 19: General Laboratory Practice.*** Please refer to the assessment strategy in *Annexe B*.

Additional information

All procedures must be undertaken in accordance with the Standard Operating Procedures (SOPs).

AC2.3 should include:

- blood
- urine
- wound swabs
- sputum
- stool
- high vaginal swabs.

AC3.1 requires the learner to describe **three** examples.

AC3.2 requires the learner to use the same **three** examples as used in AC3.1.

AC3.3 requires the learner to use **one** patient pathway.

AC3.4 includes contribution to the delivery of a high-quality, safe, patient-centred service.

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 **in own area of work and in accordance with Standard Operating Procedures (SOPs)** to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the principles and practice of microbiology	1.1	Explain the range of common samples sent to a microbiology department for analysis			
		1.2	Discuss safe handling and preparation of samples in microbiology			
		1.3	Explain the basis of epidemiology, public health, health prevention and health protection in relation to microbiology services			
		1.4	Explain the role of public health bodies in screening and outbreak control			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Be able to perform routine analysis on automated/ semi-automated and/or manual equipment in microbiology to specified quality standards	2.1	Explain the principles and practice of quality control, external quality assessment and quality management in microbiology			
		2.2	Explain the role of audit and laboratory accreditation in microbiology			
		2.3	Process a range of microbiology samples			
		2.4	Perform molecular pathology techniques for a range of samples appropriate to microbiology			
		2.5	Explain the process of report generation and distribution in microbiology			
		2.6	Apply and maintain quality standards and related quality-control, assessment and management techniques			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand the impact of microbiology on patients and the work of the multidisciplinary team	3.1	Describe patient pathways where microbiology services contribute to diagnosis and/or long-term monitoring			
		3.2	Explain how microbiology results are used in patient pathways			
		3.3	Explain the common symptoms experienced by a person in a patient pathway			
		3.4	Explain the work of multidisciplinary teams in own area of work			
		3.5	Discuss how personalised medicine is/could be used in the diagnosis and treatment of conditions appropriate to own work area			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

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