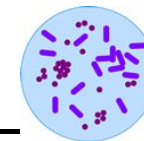


Topic: PROFESSIONAL ENGLISH FOR CLINICAL MICROBIOLOGY		Unit 1: LABORATORY TECHNIQUES	LESSONS: 1 - 4
TEACHING AIMS		TIMING : 12:00 h	
<div>1. To develop students’ understanding of basic Microbiology vocabulary</div> <div>2. To present basic procedures in the Microbiology laboratory</div> <div>3. To familiarise students with basic equipment in the Microbiology laboratory</div>			
CONTRIBUTION TO COMPETENCES			
<div>● Professional skills (students will be able to ...):<div><div>○ Interpret scientific and technical information</div><div>○ Adapt procedures to execute the activities according to established quality standards and optimizing the resources allocated</div><div>○ Prepare and use diagnostic equipment and materials, according to the procedures.</div></div></div> <div>● Functional skills (students will be able to ...):<div><div>○ Access and communicate information using ICT tools to learn</div><div>○ Use mathematics to solve problems and questions in laboratory</div><div>○ Use technical information effectively in English</div></div></div> <div>● Key skills or effectiveness for working life (students will be able to ...):<div><div>○ Solve problems</div><div>○ Undertake work in a responsible manner</div><div>○ Organise their own work and take their own initiative</div></div></div>			
LEARNING OUTCOMES		CONTENT	
<div>At the end of the lesson the students will:</div> <div>KNOW:</div> <div><div>○ The morphological classification of bacteria</div><div>○ Parts of the bright-field microscope</div><div>○ McFarland turbidity standards</div></div> <div>BE ABLE TO:</div> <div><div>○ Perform a Gram Stain</div><div>○ Use the microscope effectively</div><div>○ Prepare culture media</div><div>○ Identify defects in prepared media</div><div>○ Perform a bacterial culture</div></div> <div>BE AWARE OF:</div> <div><div>○ The importance of being rigorous at work</div><div>○ The importance of order at work</div><div>○ The importance of taking care of materials and equipment</div></div>		<div><div>1. Description of bacterial morphology</div><div>2. Perform microscopic stain</div><div>3. Perform microscopic examinations</div><div>4. Interpret a Gram stain</div><div>5. Prepare culture media</div><div>6. Perform bacterial culture</div></div>	
		COGNITION	
		<div><div>1. Identifying issues</div><div>2. Ordering sequences of events</div><div>3. Classifying concepts</div><div>4. Synthesising processes</div><div>5. Solving problems</div><div>6. Analysing concepts</div><div>7. Hypothesising about consequences of acts</div><div>8. Reasoning about facts</div></div>	



COMMUNICATION	
<b>LANGUAGE OF LEARNING</b> <ul style="list-style-type: none"> <li>Bacterial morphologies: shapes and arrangements</li> <li>Materials and reagents for Gram</li> <li>Parts of the microscope and expressions used in microscopy</li> <li>Mathematical operations: +, -, x, ÷, decimals, fractions, powers</li> <li>International System of Units</li> <li>Changes in physical state: melt, evaporate ...</li> <li>Materials and equipment to prepare culture media</li> <li>Faults in prepared media</li> <li>First and second conditional: it would ..., if we do X, Y will happen ...</li> <li>First ..., next ..., then ..., finally ...</li> <li>Prepositions of place: on the left/right, at the top/bottom, in the middle, in the top/bottom right-hand/ left-hand corner</li> <li>What happens if ...?</li> <li>As a result ...</li> <li>Grading expressions: numerous, a moderate number, scanty</li> </ul>	<b>LANGUAGE FOR LEARNING</b> <ul style="list-style-type: none"> <li>Sequencing</li> <li>Explaining consequences and cause and effect</li> <li>Giving reasons</li> <li>Describing positions</li> <li>Connecting ideas: comparing and contrasting</li> <li>Explaining mathematical operations</li> </ul>
	<b>CULTURE</b> <ul style="list-style-type: none"> <li>History of the microscope</li> </ul>
ASSESSMENT CRITERIA	
<b>FORMATIVE ASSESSMENT</b> <p>Can the student?</p> <ol style="list-style-type: none"> <li>Differentiate the steps in Gram Stain?</li> <li>Interpret a Gram Stain?</li> <li>Justify the actions in the microscopic procedure with specimens?</li> <li>Discuss the possible faults in prepared media?</li> <li>Discuss the features of a standard bacterial culture?</li> <li>Identify the basic requirements for growth of bacteria?</li> <li>Understand the utility of bacterial standards?</li> </ol>	<b>SUMMATIVE ASSESSMENT</b> <ol style="list-style-type: none"> <li>Does the student include 10 slides or more?</li> <li>Does the student include different kind of diagrams?</li> <li>Does the student present from 10 to 12 contents?</li> <li>Can the student link the contents presented?</li> <li>Can the student explain concepts properly?</li> <li>Can the student use technical words correctly?</li> <li>Does the student show self-confidence?</li> <li>Can the student talk fluently?</li> </ol>