

<b>Module Title:</b> Medical Microbiology
<b>Module Code:</b> AM307
<b>Maximum number of students:</b>
<b>Total ECTS credits:</b> 2
<b>Notional learning hours:</b> Contact time - 10 Private study - 40 <b>Format of teaching:</b> Lectures 7 Laboratories or Practicals: 3 Other <b>Teaching Strategy:</b> Formal lectures in 120 min timetable
<b>Convener:</b> Isabel Cavaco
<b>University:</b> University of Algarve
<b>Language of tuition:</b> English
<b>Module Description – The Purpose of aims</b> <ol style="list-style-type: none"> <li>To motivate students for the importance to study medical microbiology: Signs and symptoms of infection and infectious diseases; Pathogenesis and spectrum of diseases;</li> <li>Role of the microbiology laboratory in the diagnosis of infectious diseases (Bacteria, blood and tissue protozoa).</li> <li>Phases of the diagnostic cycle (preanalytic, analytic and postanalytic)</li> <li>Approach to prevention and epidemiology.</li> </ol>
<b>Learning Outcomes:</b> At the end of the module, the learner is expected to be able to: <ol style="list-style-type: none"> <li>Approach to microbial classification of bacteria: Procedures for identification of bacteria: direct detection, stains, cultivation and immunoserodiagnosis.</li> <li>Recognize some medical important organisms (Bacteria, blood and tissue protozoa): Gram-Negative: Bacilli, Coccobacilli (<i>Pseudomonas</i>, <i>Enterobacteriaceae</i>, <i>Haemophilus</i>, <i>Legionella</i>) and Cocci (<i>Neisseria</i>). Gram-Positive Cocci (<i>Staphylococcus</i> and <i>Streptococcus</i>) <i>Mycobacteria tuberculosis</i> Blood and tissue parasites (<i>Plasmodium spp</i>, <i>Trypanosoma sp</i>, <i>Leishmania donovani</i>).</li> </ol>
<b>Summary of Course Content:</b> This module aims to motivate the learners that clinical data derived from proper procedures and accurate test results are essential to make appropriate diagnosis and administer the proper therapy to patients. Provide users with recommendations for the collection and transport of specimen, procedures for specimen processing and identification of bacteria.
<b>Transferable Skills Taught:</b> Theoretical classes using data-show. Exercise and problems solving, giving articles and lecture notes.

<b>Assessment Methods:</b> Students must elaborate a pamphlet about one of the following subjects:	
<ol style="list-style-type: none"> <li>1. Legionellosis</li> <li>2. Meningitis</li> <li>3. Tuberculosis</li> <li>4. Malaria</li> <li>5. Leishmaniasis</li> <li>6. Chaga's Disease</li> </ol>	
<b>Assessment criteria:</b> Individual work.	
<b>Organization of the pamphlet</b>	0-20
<b>Content of the work</b>	
Theoretical knowledge	0-15
Criteria for laboratorial and clinical diagnosis	0-15
Procedures	0-15
<b>Consideration by the target audience</b>	0-15
<b>Global presentation and findings</b>	0-20
<b>FINAL CLASSIFICATION</b>	<b>0-100</b>
<b>Resource Implications of Proposed Solutions:</b> Lecture notes will be available for students. Will be included textbooks. Recommended reading:	
<ul style="list-style-type: none"> <li>○ Henry's Clinical Diagnosis and Management by Laboratory Methods, 21 st edition; Saunders</li> <li>○ Pathologic basis of disease, Cotran, Kumar, Collins, 6<sup>th</sup> Edition, Sauders Company</li> <li>○ Color atlas and textbook of Diagnostic Microbiology, Elmer Koneman, 6<sup>th</sup> Edition, Lippincott Williams &amp; Wilkins.</li> </ul>	