Jan Amos Komeński STATE UNIVERSITY OF APPLIED SCIENCES in Leszno

Funded by the European Union

Course syllabus for ERASMUS+ incoming students

Course Title	
Medical Microbiology: a basic course	
Academic Teacher	Prof. dr hab. med. Andrzej Szkaradkiewicz
E-mail	andrzej.szkaradkiewicz@ansleszno.pl
ECTS credits	5
Number of hours	120
Course code	INT-IZKFP-MM-26
Course description	
Medical Microbiology is a branch of science concerned with microorganisms which are pathogenic for humans. Knowledge of microbiology has proven valuable across the entire spectrum of medicine and public health More broadly, microbiology constitutes a specialized field of medical knowledge that enhances our understanding of the causes and pathogenesis of numerous diseases, as well as their transmission and prevention.	
Learning outcomes - course content	
The main learning outcome for students will be the acquisition of knowledge regarding the pathogenicity of microorganisms, the transmission of infections, and their prevention. Furthermore, students will gain an understanding of the significance of the physiological bacterial colonization of the human body by beneficial microorganisms, as well as the role of host defense mechanisms and vaccines. Course content – Lectures : 1. History of medical microbiology 2. Characteristics of bacteria and fungi 3. Colonization and infection. Infectious diseases 4. Pathogenicity of bacteria. Bacterial toxins 5. Characteristics of viruses and their replication 6. Most important of human viruses 7. Parasites: the most common parasitic diseases 8. Antimicrobial immunity. Vaccines	
Student workload (self-study description)	
Independent student work will consist of preparing one of the following presentations for assessment:	

- A novel viral infection of the 20th century – HIV
  and/or
- A novel viral infection of the 21st century – SARS-CoV-2

Course assessment:
Student will receive course credit based on the preparation and presentation of their individual assignment, as well as obtaining a positive result in a single-best-answer multiple-choice test covering the material presented during the lectures.

Literature

1. Patrick R. Murray "Murray's Basic Medical Microbiology ", Elsevier, 2023
2. Anthikad "Medical Microbiology for nurses including parasitology"
   Jaypee Brothers Medical Publishers Pvt. Limited, 2013