

Course Outline for BIOL2257 — Medical Microbiology

Credits:	3 (2/1/0)
Description:	Meets MnTC Goal Area 3. This course is the study of the structure and the classification of bacteria, viruses, parasites and fungi of medical importance. This course emphasizes the transmission of disease agents, signs and symptoms of disease, immunization, control of microbial growth, specimen collection/transport and methods of identification. An integrated lab includes basic techniques of culture, staining, biochemical testing and identification of known and unknown bacterial specimens, and identification of fungi and parasites from prepared slides. The course includes two hours of lecture and one two-hour lab per week.
Prerequisites:	Assessment into or successful completion of ENGL 1101 or college level writing equivalent.
Corequisites:	(None)
Competencies:	<ol style="list-style-type: none"> 1. Evaluate host-microbe interactions. 2. Investigate the diversity of pathogenic microorganisms. 3. Recommend methods to prevent the transmission of infectious diseases. 4. Recommend immunization protocols. 5. Perform various laboratory diagnostic procedures to identify microorganisms. 6. Identify the most common disease agents of medical importance using signs, symptoms, and lab results. 7. Assess methods and limitations of antimicrobial agents to control pathogenic microorganisms in humans. 8. Evaluate the importance of proper patient specimen collection and transport. 9. Compare methods to identify microorganisms. 10. Evaluate the importance of using aseptic technique and Standard Precautions in the medical setting.
Goal Areas:	(3) Natural Sciences