BIOL 200 Microbiology

Credit Hours: 4

Scheduled hours per week

Lecture: 3 Lab: 2 Field Experience:

Catalog Course Description: Designed for students requiring a basic medical microbiology course to meet program requirements or as a science elective. Topics include types of microorganisms, microbial growth and metabolism, control of microbial populations, microbial resistance, and principles of infection and immunity.

Prerequisites: BIOL 107 and 108; OR BIOL 101/103 and 102/104; OR BIOL 115 and 117

Corequisites: None

Course Learning Outcomes (CLO):

- 1. Recognize important historical events in microbiology.
- 2. Explain the germ theory of disease.
- 3. Compare the basic cell structure of prokaryotic and eukaryotic cells.
- 4. Explain basic concepts of bacterial nutrition and growth.
- 5. Explain the classification schemes applied to prokaryotic and eukaryotic organisms.
- 6. Describe methods of control of bacterial populations and infections.
- 7. Describe the normal microbial flora of the body.
- 8. Apply biological relationships to specific states of health and disease.
- 9. Describe nonspecific host defense mechanisms.
- 10. Explain basic principles of immunology.
- 11. Describe microbial disease processes involving the skin and eye.
- 12. Describe microbial disease processes involving the central nervous system.
- 13. Describe microbial disease processes involving the cardiovascular and lymphatic systems.
- 14. Describe microbial disease processes involving the respiratory system.
- 15. Describe microbial disease processes involving the digestive system.
- 16. Describe microbial disease processes involving the urinary system and genital system.
- 17. Give oral presentations to the class.

CLO Assessment Methods:

- Direct methods Lab Activities, Tests, Quizzes, Written papers
- Indirect methods course evaluations

Topics to be studied:

- Cell Structure and function
- Metabolism
- Microbial growth
- Prokaryotes
- Eukaryotic Microbes
- Viruses
- Disease and immunity
- Pathogenicity

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• Antimicrobial drugs

Relationship of Course to Program Learning Outcomes (PLO) Check if approved as: ☐ Foundational Learning Course	•
Special requirements of the course:	
Additional information: None	

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