CDS 3310 Microbiology of Infectious Diseases Lab

Day/TimeTBDLocation Human Health Building 5016

 Instructor
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 Office Hours
 TBD

Course Description Laboratory to accompany CDS 3300. Includes basic microbiological procedures such as aseptic technique, isolation, cultivating, biochemical characteristics and staining of selected microbes, with regard to their importance in the diagnosis of human diseases.

Course Objectives Upon completion of this course the student will achieve the ability to:

- Properly prepare and view bacterial isolates for microscopic examination.
- Explain the purpose of the Gram stain, perform the procedure, and interpret the results.
- Describe the appropriate clinical situation to perform a direct smear, an acid fast stain, and an India ink stain, explain the principle of each, and interpret the results.
- Demonstrate proficiency in bacterial streaking for isolation and explain the principle associated with this technique and how colonies are enumerated.
- List and give an example of the four general types of media, and explain how each is used in the preliminary identification of bacterial isolates.
- Differentiate the types of hemolysis on the blood agar.
- Associate the colony characteristics on media with microscopic findings to make preliminary identification of microorganisms.
- Use appropriate media, basic biochemical and enzymatic tests to identify microorganisms, and evaluate the potential pathogenic organisms according to the site of infection.
- Perform antimicrobial susceptibility testing on potential pathogenic isolates using these methods and correctly interpret the results: Kirby Bauer, Etest, Macrobroth, MIC panel
- Demonstrate proper microbiology lab safety practices by following universal precautions, proper usage of PPE, hand washing, and aseptic techniques.
- Demonstrate professionalism through attendance, participation in group and class discussions, and finishing work on time.

Grading

Points are achieved from successful completion of graded exercises as listed below. Practical exams cannot be taken early or made up.

Total Points	200	Adjusted to percentile grading form
Lab participation	50	
Lab worksheets	50	
Practical exam	100	

Class Policies

- In accordance with professional behavior, attendance to all the labs is expected. Notify the instructor ahead of time if you are unable to attend a lab session. Students are expected to come to the labs prepared and on time.
- The university policy will be explicitly followed regarding academic conduct including plagiarizing and cheating on exams and other in-class or online assignments. Refer to the <u>academic conduct policy webpage</u> for a detailed information.
- OU policy regarding add/drops will be followed. It is the student's responsibility to be aware of all OU deadline dates. (Link to Fall 2017 important dates).

Grading Scale

Percent	Grade
95.00-100	A
90.00-94.99	A-
87.00-89.99	B+
83.00-86.99	В
80.00-82.99	B-
77.00-79.99	C+
73.00-76.99	С
70.00-72.99	C-
65.00-69.99	D+
60.00-64.99	D
<60.00%	F