

CDS 3300  
Microbiology of Infectious Diseases

**Day/Time** TBD

**Location** TBD

**Instructor** Christina Lim, MS, MLS(ASCP)SM  
lim@oakland.edu

**Office Hours** TBD

**Course Description** This course will introduce students to principles of microbiology with emphasis on microorganisms causing disease in humans. Topics covered include specimen collection and processing, epidemiology and infection control, host-microbe interactions, antimicrobial susceptibility, identification and diagnosis of agents of human infections.  
Prerequisite: BIO 111 or BIO 1200

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

- Describe the taxonomy, structure, and classification of bacteria.
- Describe how specimens for microbiology workup are processed including staining, media for cultivation, proper environments for incubation, and safety procedures.
- Relate infection control practices that prevent the spread of infection to the control and containment of the organism concerned.
- Explain the principles of antimicrobial action and resistance, and describe human practices that may have contributed to the development of antibiotic resistance.
- Describe antimicrobial susceptibility testing methods, and list the common antibiotics used to treat infections by clinically significant bacteria.
- Define and describe the different interactions between the host and the microorganism and analyze how these host-microorganism interactions influence the health of the human host.
- Identify the clinically-significant bacteria encountered in the clinical setting, describe the disease states caused by these organisms, and explain the mechanism of their pathogenesis and virulence.
- Provide the proper specimen, cultivation techniques, basic biochemical and enzymatic tests required to identify clinically-significant organisms.
- Synthesize clinical, pathological, and laboratory data to make a basic diagnosis.

**Required Text** TBD

**Course Format** A combination of lectures and case studies. Case studies are on-line assignments that will reinforce the student's understanding of the lecture materials. Case study assignments will assess the student's ability to synthesize and discuss clinical microbiology information. Regular class attendance and participation will help you in formulating fully developed answers on the case study questions. The exams will be a combination of multiple choice and short answer questions. No scantrons needed. Exam questions will come from all lecture materials (including the explanations given in class and the case studies.) Major themes focused on are microbial virulence, pathogenesis, epidemiology, and clinical diagnosis.

## Course Grading

Exam 1	100
Exam 2	100
Exam 3	100
Final Exam	100
Case Studies	100
<b>Total Points</b>	<b>500</b>

Adjusted to percentile grading format

## Class Policies

- 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 [academic conduct policy webpage](#) 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](#)).
- In accordance with professional behavior, regular class attendance and participation is expected. Students are expected to prepare for and take the exams at the scheduled date and time. Case studies must be turned in by the due date and time; assignments that are submitted after will **not** be graded.
- If you have technical issues in Moodle, contact the Moodle help desk first. They will notify me of the problem and we will work together to resolve the issue.

ELIS Student page <http://www2.oakland.edu/elis/page.cfm?id=2217>

Help Request Form <http://www2.oakland.edu/elis/help.cfm?formname=moodle>

## Grading Scale

<b>Percent</b>	<b>Grade</b>
<b>95.00-100</b>	A
<b>90.00-94.99</b>	A-
<b>87.00-89.99</b>	B+
<b>83.00-86.99</b>	B
<b>80.00-82.99</b>	B-
<b>77.00-79.99</b>	C+
<b>73.00-76.99</b>	C
<b>70.00-72.99</b>	C-
<b>65.00-69.99</b>	D+
<b>60.00-64.99</b>	D
<b>&lt;60.00%</b>	F