MLT 3787L - Diagnostic Microbiology Laboratory

Fall 2026 Syllabus, Section 01, CRN 41299,

Credit hours: 2

Instructor

Joan O'Connell

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Public Instructor Information

Instructor Title:

Instructor Title: Dr Joan O'Connell
Associate Professor/Chairperson Department of Clinical and Diagnostic Health Sciences

• Instructor Professional Qualifications:
• Doctor of Education/Educational Leadership-Youngstown State University 2021
• Master's/Curriculum and Instruction-Youngstown State University 2011
• Bachelor of Science degree Medical Laboratory Science - Youngstown State University 1992

Instructor Office Location: Cushwa Hall 2226 Instructor Office Phone: 330-941-3326
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Instructor Professional Qualifications:
Instructor Office Location:
Instructor Office Phone:

Course Description

3787L. Diagnostic Microbiology Laboratory. A clinical approach to the study of bacteria, fungi, viruses, and parasites. Methods to isolate and identify clinically significant pathogens from clinical specimens; case studies in clinical microbiology. Six hours lab per week. Identical with BIOL 3787L, MLS 3787L. Prereq.: MLT 1501 and MLT 1501L. Coreq.: MLT 3787. 2 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Introduction to Diagnostic Microbiology for Laboratory Sciences	Delost	ISBN:9781284199734

Delost, Introduction to Diagnostic Microbiology for the Laboratory Sciences, Jones & Bartlett Learning, 2nd edition (2022)

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Tue	8/25	Chapter 2: 19-32	Syllabus review. Laboratory Safety	
Thu	8/27	No Class		
Tue	9/1	Chapter 5: 71-80 Lab Exercise 587-590	Microscopy, Staining, and Direct examination	
Thu	9/3	Chapter 5: 71-80 Lab Exercise 587-590	Microscopy, Staining, and Direct examination	Lab exercise due end of lab

Tue	9/8	Chapter 6:81-94 Lab Exercises 591-600	Culture and Identification Methods	
Thu	9/10	Chapter 6:81-94 Lab Exercises 591-600	Culture and Identification Methods	Lab exercise due end of lab
Tue	9/15	Lab Excercises: 621-625	Staphylococcus and Micrococcus	
Thu	9/17	Lab Excercises: 621-625	Staphylococcus and Micrococcus	Lab exercise due end of lab
Tue	9/22	Lab Exercises: 626-630	Streptococcus and Enterococcus	
Thu	9/24	Lab Exercises: 626-630	Streptococcus and Enterococcus	Lab exercise due end of lab
Tue	9/29	Assessment	Unknown GPC	
Thu	10/1	Assessment	Unknown GPC and Quiz 1	Quiz 1 Unknown Due Tuesday 10/8
Tue	10/6	Lab exercise: 633-644	Enterocacteriaceae	
Thu	10/8	Lab exercise: 633-644	Enterocacteriaceae	Lab exercise due end of lab
Tue	10/13	Lab exercise: 645-647	Nonfermentative GNB	
Thu	10/15	Lab exercise: 645-647	Nonfermentative GNB	Lab exercise due end of lab
Tue	10/20	Lab exercise: 648-650 and 631-632	Haemophilus and Neisseria	
Thu	10/22	Lab exercise: 648-650 and 631-632	Haemophilus and Neisseria	
Tue	10/27	Lab exercise: 648-650 and 631-632	Haemophilus and Neisseria	Lab exercise due end of lab
Thu	10/29	Assessment	Unkown 2	
Tue	11/3	Assessment	Unkown 2 and Quiz 2	Quiz 2 Unknown 2 due 11/5
Thu	11/5	Lab exercise: 601-605 (read only) Chapter 8: 98-128	Antimicrobial Susceptibility	
Tue	11/10	Handout and Practice	MicroScan Operation	
Thu	11/12	Lab exercise: 661-665 Chapter 21: 381-419	Mycology	
Tue	11/17	Lab exercise: 661-665 Chapter 21: 381-419	Mycology	Lab exercise due end of lab
Thu	11/19	Chapter 24: 533-577 Lab exercise: 671-684	Clinical Specimens and Infections	
Tue	11/24	Chapter 24: 533-577 Lab exercise: 671-684	Clinical Specimens and Infections	Lab exercise due end of lab
Thu	11/26	No Class		
Tue	12/1	Assessment	Unknown 3	Unknown 3 due 12/5
Thu	12/3	Assessment Assessment	Final Exam	Final Exam
Tue	12/8	No Class		
Thu	12/10	No Class		

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.