

MLT 2603L - Advanced Immunohematology Laboratory

Fall 2026 Syllabus, Section 01, CRN 42450,

Credit hours: 1

Instructor

Hiba Ismail

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Public Instructor Information

Instructor Title: Professor: Hiba M Ismail

Instructor Professional Qualifications:

Professor: Hiba M Ismail

Professional Qualifications:

MHHS, Education, Youngstown State University, 2012

Bachelor's, Medical Laboratory Science, Youngstown State University, 2005

Bachelor's, Applied Science, Youngstown State University, 2002

Associate's, Medical Laboratory Technology, Youngstown State University, 2002

Medical Laboratory Scientist, MLS(ASCP)^{CM} American Society for Clinical Pathology (Board Certified; Certification Maintenance)

Instructor Office Location: Cushwa Hall

Instructor Office Phone: 330-941-1761

Course Description

2603L. Advanced Immunohematology Laboratory. Application of advanced theories in Immunohematology. Three hours of laboratory per week.

Prereq.: MLT 1502 and 1502L with a "C" or better. Cross-Listed: MLS 2603L. 1 s.h.

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Course Readings

Group	Title	Author	ISBN
Required	Basic & Applied Concepts of Blood Banking and Transfusion Practices, 5th edition		ISBN: 9780323697392

All notes, assignments and handouts will be posted to blackboard. It is required to have a computer that can access Respondus and Blackboard. This is a link to computer lab locations on campus.

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
Wed	9/2	Antibody Identification in PEG/LISS*	Antibody Identification in PEG/LISS*	Homework #1: Antibody Identification Panels Due: 9/09/26 at the beginning of lab

Wed	9/9	ABO/Rh IAT Typing in Gel*	ABO/Rh IAT Typing in Gel*	Homework #2: Gel Methodology worksheet (Blackboard) Due: 9/23/26 at 11:59pm
Wed	9/16	Solid phase Capture*		Homework: See Week 3
Wed	9/23	09/23/2026 Elution-Part 1	09/23/2026 Elution-Part 1	Quiz 1: Antibody Identification Methodologies (in-class)
Wed	9/30	09/30/2026 Elution-Part 2*	09/30/2026 Elution-Part 2*	Homework #3: DAT/Elution worksheet (Blackboard) Due: 10/14/26 at 11:59pm
Wed	10/7	Midterm Review Quiz 2: DAT/Elution		
Wed	10/14	10/14/2026 Midterm		10/14/2026 Midterm
Wed	10/21	Fetal Screen* Homework #4:	Fetal Screen/KB Worksheet Due: In class 10/28/26 at the beginning of lab	Fetal Screen/KB Worksheet Due: In class 10/28/26 at the beginning of lab
Wed	10/28	Kleihauer-Betke	Homework: See Week 9	Homework: See Week 9
Wed	11/4	Antigen Typing*	Quiz 3: Fetal Screen/KB Homework #5: Antigen Typing Worksheet Due: In class 11/18/26 at the beginning of lab	Quiz 3: Fetal Screen/KB Homework #5: Antigen Typing Worksheet Due: In class 11/18/26 at the beginning of lab
Wed	11/11	No lab session-University Closed		
Wed	11/18	Final Exam Review Homework:	See Week 11 Quiz 4: Antigen Typing	See Week 11 Quiz 4: Antigen Typing
Wed	12/2	Final Exam Comprehensive		Comprehensive Final Exam

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