

MLT 1501 - Introduction to the Medical Laboratory Profession

Fall 2026 Syllabus, Section 01, CRN 41262,

Credit hours: 2

Instructor

Hiba Ismail

Email: hmismail@ysu.edu

Public Instructor Information

Professor: Hiba M Ismail MHHS, MLS(ASCP)^{CM}

Professional Qualifications:

MHHS, Health and Human Services, 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

ASCP Board Certified, MLS(ASCP)^{CM}

Preferred contact method: hmismail@ysu.edu, I will respond within 24hrs.

Office: Cushwa Hall

Office phone number: 330_941-1761

Course Description

1501. Introduction to the Medical Laboratory Profession. Overview of the medical laboratory profession, ethics, responsibilities and clinical relevance of laboratory procedures. Prereq.: Level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505. Coreq.: MLT 1501L. 2 s.h.

MLT 1501, Introduction to Medical Laboratory Profession; taken concurrently with MLT 1501L. Prereq: Level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505. Coreq.: MLT 1501L. 2 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Required textbook: Turgeon, M. (2023). Clinical Laboratory Science concepts, procedures, and clinical applications (9th ed.). Elsevier Inc. ISBN# 978-0323829342		

Required textbook: Turgeon, M. (2023). *Clinical Laboratory Science concepts, procedures, and clinical applications* (9th ed.). Elsevier Inc. ISBN# 978-0323829342.

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

Weekly Schedule

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Tue	8/25	Introduction Chapter 1: Fundamentals of the Clinical Laboratory		
Tue	9/1	Introduction Chapter 1: Fundamentals of the Clinical Laboratory		



Tue	9/8	Chapter 3: Quality Assessment and Quality Control in the Clinical Laboratory
Tue	9/15	Chapter 7: Basic and Contemporary Techniques
Tue	9/22	Chapter 8: Laboratory Testing from POC to Total Automation
Tue	9/29	Chapter 9: Phlebotomy
Tue	10/6	MIDTERM: Comprehensive Chapters 1,2,3,4,8,9
Tue	10/13	MIDTERM: Comprehensive Chapters 1,2,3,4,8,9
Tue	10/20	Chapter 12: Renal Physiology and Urinalysis
Tue	10/27	Chapter 13: Other body Fluids
Tue	11/3	Chapter 16: Medical Microbiology
Tue	11/10	Chapter 18: Immunohematology and Transfusion Medicine
Tue	11/17	Chapter 14: Clinical Chemistry
Tue	11/24	Chapter 17: Immunology and Serology
Tue	12/1	Chapter 11: Hemostasis and Blood Coagulation
Tue	12/8	Final Comprehensive – Final Comprehensive

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.