

MLS 4811L - Adv Immuno/Sero, Urinalysis, and Molecular Competency

Fall 2026 Syllabus, Section 01, CRN 43957,

Credit hours: 2

Instructor

Farhana Mueez

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Public Instructor Information

Instructor Title:

Farhana Mueez M.D., M.H.A., MLS (ASCP)cm

Program Director Medical Laboratory Science Programs

Instructor Professional Qualifications:

M.D., ECFMG Certified-2011

M.H.A., University of Phoenix-2006

MLS (ASCP)cm: University of Kentucky-2017

Instructor Office Location:

Dept. of Health Professions

Cushwa Hall Room # 2450

Instructor Office Phone:

Phone # 330-941-4681

Course Description

4811L. Adv Immuno/Sero, Urinalysis, and Molecular Competency. Competent application of Immunological and Serological techniques utilized in the medical laboratory. Competent application of techniques in Urinalysis and Molecular Diagnostics. Admission to the MLS Advanced Placement Online Completion Program. 2 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Molecular Diagnostics Fundamentals, Methods, and Clinical Applications 4th edition	Lela Buckingham	978-1-7196-5113-4
Optional	Immunology & Serology in Laboratory Medicine 7th edition	Mary Louise Turgeon	978-0-323-71193-7
Optional	Fundamentals of Urine & Body Fluids Analysis 4th edition	Nancy A. Brunzel	978-0-323-37479-8

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

Schedule Fall 2026

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Optional Readings from the Class readings	Hospital Based Competency Course Students performed Clinical Testing under supervision to gain Clinical competency in specific discipline	
8/31	Optional Readings from the Class readings	Hospital Based Competency Course Students performed Clinical Testing under supervision to gain Clinical competency in specific discipline	
9/7	Optional Readings from the Class readings	Hospital Based Competency Course Students performed Clinical Testing under supervision to gain Clinical competency in specific discipline	
9/14	Optional Readings from the Class readings	Hospital Based Competency Course Students performed Clinical Testing under supervision to gain Clinical competency in specific discipline	
9/21	Optional Readings from the Class readings	Hospital Based Competency Course Students performed Clinical Testing under supervision to gain Clinical competency in specific discipline	
9/28	Optional Readings from the Class readings	Hospital Based Competency Course Students performed Clinical Testing under supervision to gain Clinical competency in specific discipline	
10/5	Optional Readings from the Class readings	Hospital Based Competency Course Students performed Clinical Testing under supervision to gain Clinical competency in specific discipline	

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.