BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCE ADVANCED PLACEMENT OPTION

Program Director: Joan O’Connell-Spalla  
(330) 941-1761  
joconnellspalla@ysu.edu

Advanced Placement Option - Medical Laboratory Science

The Advanced Placement Option in the Medical Laboratory Science program provides a pathway for ASCP certified Medical Laboratory Technicians (MLT) to become Medical Laboratory Scientists (MLS). The program is designed to meet the needs of the working medical laboratory technician so that they can pursue their degree while still employed as a laboratory professional and to address the growing local, regional and national shortage of medical laboratory scientists.

Applicants must meet the following criteria for acceptance into the program:

• Have graduated from a NAACLS accredited MLT/CLT program
• Have completed prerequisite course work in biology, chemistry, and mathematics and also meet Biology and Chemistry guidelines for eligibility for the ASCP MLS Certification examination.
• Be certified as a MLT(ASCP)
• Be employed in an accredited laboratory that is able to provide training in all required MLS disciplines.

Students may transfer courses from approved institutions with prior approval from the program director or department chairperson. Students may be granted experiential credit for a clinical course and, if so, will not be required to register for that course.

PROGRAM ACCREDITATION

The MLS Advanced Placement online completion program is accredited through the National Accrediting Agency for Clinical Laboratory Sciences and meets the standards developed by the American Society of Clinical Pathologists (ASCP).

The National Accrediting Agency for Clinical Laboratory Sciences  
5600 N. River Rd., Suite 720  
Rosemont, IL 60018-5119  
phone (773) 714-8886  
http://www.naacls.org

Program Outcomes:
Certification pass rates for students who graduated between Fall 2018 through Spring 2021:

• Number of Graduates: 13
• Number of Graduates who sat for the certification exam: 5
• Number of Graduates who passed the certification exam: 3
• Overall certification exam pass rate: 60%

Graduation and Placement rates for the period Fall 2018 through Spring 2021:

• Graduation rate: 90%
• Placement rate: 100%

Learning Outcomes

The student learning outcomes for the medical laboratory programs (MLS-BS and MLT-AAS) are as follows:

• Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians and medical laboratory scientists. At entry level, the medical laboratory graduate will be able to demonstrate the ability to comprehend, apply and evaluate information relative to the medical laboratory profession.
• These learning outcomes include comprehension of the theory and the ability to apply and evaluate the didactics of hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics.
• Graduates will be prepared to function as entry-level health care professionals in the medical laboratory as medical laboratory technicians and medical laboratory scientists. Upon completion of the program, graduates will demonstrate technical proficiency in laboratory applications.
• These psychomotor learning outcomes include the performance of laboratory procedures in hematology, clinical chemistry, immunohematology, microbiology, immunology, coagulation, molecular diagnostics, and other emerging diagnostics. The graduate will demonstrate proficiency in the functions of all phases of laboratory analysis (pre-analytical, analytical, and post-analytical processes).
• Graduates will demonstrate professional conduct and interpersonal communication skills consistent with the medical laboratory profession.
• Students will exhibit the ability to think critically across all 3700-level courses through the application of fundamental didactic and psychomotor skills to assess the medical relevance and significance of specific aspects of laboratory testing.

COURSE | TITLE | S.H.
--- | --- | ---
ENGL 1550 | Writing 1 | 6
ENGL 1551 | Writing 2 | 6
Speech | | 3
CMST 1545 | Communication Foundations | 6
Math/Statistics | | 6
STAT 2625 | Statistical Literacy and Critical Reasoning | 4
STAT 2601 | Introductory Statistics | 4
Arts & Humanities (2 courses) | | 6
Social Sciences (2 courses) | | 6
SPA (2 courses) | | 6
Intro to Online | | 3
AHLT 1500 | | 6

Major Courses

- MLS 4800: MLS Chemistry Clinical Experience | 7
- MLS 4801: MLS Hematology Clinical Experience | 4
- MLS 4801L: MLS Hematology Laboratory | 3
- MLS 4802: MLS Immunohematology Clinical Experience | 4
- MLS 4802L: MLS Immunohematology Laboratory | 3
- MLS 4803: MLS Microbiology Clinical Experience | 5
- MLS 4803L: MLS Microbiology Laboratory | 3
- MLS 4804: Miscellaneous Clinical Experience | 4
- MLS 4804L: Miscellaneous Laboratory | 2

Science Requirements

- Biology (Must include A&P, Micro, Immunology) | 16
- Chemistry (Must include Organic or Biochemistry) | 16

For course titles and descriptions, please refer to the student handbook or program website.