Medical Laboratory Sciences

Medical Laboratory Science (MLS) is a challenging profession requiring precise and accurate evaluation techniques and keen problem-solving and judgment skills that apply the basic sciences to the clinical diagnosis of health and disease. Medical laboratory scientists are educated in the theoretical and practical aspects of laboratory medicine. As vital members of the health care team, laboratory professionals provide information necessary for the diagnosis and treatment of disease.

The Bachelor Science in Health Sciences (BSHS) in MLS, an online degree completion program, is a blend of basic sciences and medical sciences that will educate students to practice in the disciplines of hematology, immunology/serology, microbiology, chemistry, blood banking, microscopy, and molecular diagnostics. Medical laboratory scientists may practice in hospitals, independent commercial laboratories, clinics, physician offices, blood banks, public health departments, ambulatory care centers and other settings. MLS offers a wide variety of career options, including research, business, industry, sales and marketing. Students may also use this major to prepare for medical or graduate school.

Curriculum

Transferable Coursework
(60 credit hours)

For an assessment on the transferability of your previous coursework, please contact the program office. Coursework will be evaluated for transfer using the following criteria:

- College-level
- Academic in nature
- Completed at a regionally accredited institution
- Earned with a ‘C’ or better

General Education (41 credit hours)

English Composition (3 credits)
Biology (lecture and ‘hands-on’ lab) (8 credits)
Microbiology (lecture and ‘hands-on’ lab) (4 credits)
Chemistry (lecture and ‘hands-on’ lab) (8 credits)
Organic Chemistry or Biochemistry (3 credits)
College Algebra, Statistics, or higher (3 credits)
Humanities and/or Social Sciences (12 credits)*

Military Medical Laboratory Technicians (MLTs) may receive transfer credit for General Microbiology and some Chemistry coursework. Military MLTs may need additional Biology and Chemistry coursework, depending on their academic preparation.

*Applicants may complete outstanding coursework through additional Health Sciences Distance Education courses.

Electives (19 credit hours)

Academic credit may be awarded for ACE-recognized military courses.

Students successfully completing this program are eligible to sit for national certification exams. The GW MLS Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

NAACLS • 5600 N. River Rd., Suite 720
Rosemont, IL 60018-5119
t 773-714-8880 • www.naacls.org

BSHS IN MEDICAL LABORATORY SCIENCE

The BSHS in MLS requires successful completion of 120 credit hours, including at least 60 credit hours of GW coursework:

Transferable Coursework
Coursework at GW

General Education
MLS Major Courses
41 credit hours
45 credit hours

Electives
Health Sciences Distance Education
19 credit hours
15 credit hours

Coursework at GW
(60 credit hours; 3 credits each, unless noted)

MLS Major Courses (45 credit hours)

Phase I - Didactic courses

MLS 4114 Clinical Microbiology I (2 credits)
MLS 4115 Clinical Parasitology & Mycology (1 credit)
MLS 4118 Laboratory Operations (1 credit)
MLS 4120 Urinalysis & Body Fluids (1 credit)
MLS 4124 Clinical Microbiology II (2 credits)
MLS 4128 Hematology I (2 credits)
MLS 4129 Hematology II (2 credits)
MLS 4140 Clinical Laboratory Management
MLS 4141 Immunology & Serology
MLS 4145 Clinical Biochemistry I
MLS 4150 Immunohematology
MLS 4151 Molecular Diagnostics
MLS 4155 Clinical Biochemistry II (2 credits)
MLS 4159 Capstone Seminar (1 credit)

Phase II - Clinical rotations. Completed at an approved clinical site and vary in length, lasting between 1 to 4 weeks each, for a total of 4 months.

MLS 4160 Blood Bank Practicum
MLS 4161 Clinical Biochemistry Practicum (4 credits)
MLS 4162 Clinical Hematology and Hemostasis Practicum
MLS 4163 Clinical Immunology and Serology Practicum (1 credit)
MLS 4164 Clinical Microbiology Practicum (4 credits)
MLS 4165 Urinalysis and Body Fluids Practicum (1 credit)

Health Sciences Distance Education (15 credit hours)

Completed as part of Phase I

HSCI 2102 Pathophysiology
HSCI 2105 Current Issues in Bioethics
HSCI 2112W Writing in the Health Sciences
HSCI 4112W Research and Writing in the Health Sciences
HSCI Elective
Throughout the program students will:

- Acquire the necessary knowledge and skills to **perform diagnostic laboratory testing** on patient specimens.
- **Develop, establish, and perform procedures** for collecting, processing, and analyzing biological specimens.
- Perform analytical tests on human specimens using various manual and automated technologies to **aid in the diagnosis of diseases**.
- Confirm abnormal results, verify, and execute quality control procedures, and **develop solutions to problems** concerning the generation of laboratory data.
- **Exercise principles** of laboratory safety and management.
- **Integrate and correlate** clinical laboratory results and formulate decisions regarding possible discrepancies.
- **Maintain and promote standards of excellence** in performing and advancing the medical laboratory science field.
- Acquire the capacity to **become leaders in the medical laboratory science profession**.

Apply for Admission

**ADMISSIONS REQUIREMENTS**
All applicants are required to complete an online application as well as submit the following supporting documents:

- Official transcripts from all previous academic institutions
- One letter of recommendation
- Current resume
- Current copy of orders (military only)
- A statement of purpose
- Essential Functions & Clinical Site Verification Forms

Admitted students may begin their course of study during the Spring, Summer, or Fall semester.

**COSTS AND FUNDING**
Current information concerning tuition, fees, and other estimated expenses can be found at colonialcentral.gwu.edu.

Students who are on active-duty are eligible for a **special military discount tuition rate**. Please contact the program office for further information.

**REQUIRED TESTS**
The program does not require the submission of an entrance exam. Applicants whose native language is not English or who are not citizens of countries where English is the official language are required to submit scores from either TOEFL or IELTS. Please visit the Admissions website for more detailed information.

Connect

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