

MEDICAL LABORATORY SCIENCE UNDERGRADUATE CERTIFICATE

The Medical Laboratory Science program prepares graduates to function in responsible positions in a laboratory environment. Students learn in a dynamic environment where they can put their studies into practice through a comprehensive clinical experience that coordinates with classroom lectures and activities. The real-world expertise of faculty and clinical staff shapes students into professionals with the right knowledge, skills and attitudes for a successful career. Students entering the 12-month program must have completed three years of college, including specific prerequisite courses, at an affiliate institution and be eligible for a baccalaureate degree following completion of the program's coursework. Candidates who have already received a baccalaureate degree may also be eligible for entry into the program, provided they have fulfilled necessary prerequisite science coursework. Classes take place on campus, with clinical experience provided in a variety of clinical laboratories.

Upon successful completion of the program, graduates are prepared to enter the health care field as entry-level medical laboratory scientists and are eligible to sit for a national certifying exam. Successful completion of the program is not dependent on passing a certification exam.

Mission

The mission of the Medical Laboratory Science program is to prepare students to enter the profession with the knowledge, skills and attitudes needed for clinical competence and with the independent learning skills needed to grow in and contribute to the profession throughout their careers.

Learning Goals and Objectives

Goal 1: Collaborate with diverse health care team members to provide patient care and perform quality, cost-effective laboratory procedures.

Goal 2: Incorporate concepts learned through classroom instruction and clinical practice to ensure accurate, meaningful laboratory results that reflect current standards of care.

Goal 3: Practice responsibly in compliance with ethical, social, legal and regulatory requirements of medical laboratory science professionals.

Goal 4: Utilize appropriate methods for the basic operation and troubleshooting of laboratory instrumentation and information systems.

Goal 5: Recognize the importance of continuously integrating new technologies and procedures into clinical practice.

Goal 6: Demonstrate a commitment to maintain competency and promote development through participation in professional activities.

Requirements

| Code | Title | Hours |
|---------|---------------------------|-------|
| MLS 401 | Fund Oper of Clinical Lab | 2 |
| MLS 411 | Clinical Microbiology I | 4 |
| MLS 421 | Clinical Hematology I | 4 |
| MLS 431 | Medical Lab Chemistry I | 4 |

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|---------|-----------------------------------|---|
| MLS 441 | Med Lab Immunology/Serology | 2 |
| MLS 451 | Clinical Lab Practicum I | 3 |
| MLS 402 | Clin Parasitology and Mycology | 2 |
| MLS 412 | Clinical Microbiology II | 4 |
| MLS 422 | Clinical Hematology II | 4 |
| MLS 432 | Medical Lab Chemistry II | 3 |
| MLS 442 | Med Lab Immunohematology | 3 |
| MLS 452 | Clinical Lab Practicum II | 3 |
| MLS 453 | Clinical Lab Practicum III | 3 |
| MLS 454 | Clinical Lab Practicum IV | 3 |
| MLS 461 | Lab Leadership Mgmt Skills | 4 |
| MLS 471 | Medical Lab Leadership Skills (*) | 6 |

Total Hours 54

*Students participate in required seminar courses during the fall and spring semesters. Credit is applied upon completion of assignments in the summer semester.

Plan of Study

| Course | Title | Hours |
|--------------------|--------------------------------|-----------|
| First Year | | |
| Fall | | |
| MLS 401 | Fund Oper of Clinical Lab | 2 |
| MLS 411 | Clinical Microbiology I | 4 |
| MLS 421 | Clinical Hematology I | 4 |
| MLS 431 | Medical Lab Chemistry I | 4 |
| MLS 441 | Med Lab Immunology/Serology | 2 |
| MLS 451 | Clinical Lab Practicum I | 3 |
| MLS 471 | Medical Lab Leadership Skills | 2 |
| Hours | | 21 |
| Spring | | |
| MLS 402 | Clin Parasitology and Mycology | 2 |
| MLS 412 | Clinical Microbiology II | 4 |
| MLS 422 | Clinical Hematology II | 4 |
| MLS 432 | Medical Lab Chemistry II | 3 |
| MLS 442 | Med Lab Immunohematology | 3 |
| MLS 452 | Clinical Lab Practicum II | 3 |
| MLS 471 | Medical Lab Leadership Skills | 2 |
| Hours | | 21 |
| Summer | | |
| MLS 453 | Clinical Lab Practicum III | 3 |
| MLS 454 | Clinical Lab Practicum IV | 3 |
| MLS 471 | Medical Lab Leadership Skills | 2 |
| Hours | | 8 |
| Total Hours | | 50 |