

# Medical Laboratory Science

## Goals and Outcomes

### Medical Laboratory Science Program

#### Mission

In support of the mission of the College, the mission of the Medical Laboratory Science program is to transform lives by educating, engaging and empowering professionals enabling them to function as competent entry-level medical laboratory scientists and serve in leadership, educational, and technical roles within the profession.

#### Program Goals

1. The program's master curriculum prepares graduates with the psychomotor skills, cognitive knowledge, and affective attitudes necessary to function as competent entry-level medical laboratory scientists.
2. The program's master curriculum is in compliance with National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) accreditation criteria.
3. The program's master curriculum prepares graduates with the cognitive knowledge necessary to successfully pass the American Society of Clinical Pathology Board of Certification exam.

#### Student Learning Outcomes

The Medical Laboratory Science program prepares professionals with entry-level competencies necessary to perform the full range of clinical laboratory tests in the areas of clinical chemistry, hematology/hemostasis, immunology, immunohematology/transfusion medicine, microbiology, urine and body fluid analysis, laboratory operations, and other emerging diagnostics, and play a role in the development and evaluation of test systems and interpretive algorithms. Student learning outcomes include:

1. Demonstrate cognitive knowledge of the concepts, principles, and theories necessary to function as a competent entry-level medical laboratory scientist.
2. Demonstrate the affective behaviors necessary to function as part of the healthcare team.
3. Demonstrate the psychomotor skills necessary to function as a competent entry-level medical laboratory scientist.

#### NAACLS Entry-Level Competencies

The medical laboratory scientist will have diverse responsibilities in areas of analysis and clinical decision-making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed or performed. The Medical Laboratory Science program curriculum is designed to develop these skills at entry-level by integrating theoretical concepts with clinical laboratory training. At completion of the Medical

Laboratory Science program, students will have basic knowledge and skills in:

1. Application of safety and governmental regulations and standards as applied to clinical laboratory science;
2. Principles and practices of professional conduct and the significance of continuing professional development;
3. Communications sufficient to serve the needs of patients, the public and members of the health care team;
4. Principles and practices of administration and supervision as applied to clinical laboratory science;
5. Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services;
6. Principles and practices of clinical study design, implementation and dissemination of results;
7. Pre-analytical, analytical, and post analytical components of laboratory services. This includes principles and methodologies, performance of assays, problem-solving, troubleshooting techniques, interpretation and evaluation of clinical procedures and results, statistical approaches to data evaluation, principles and practices of quality assurance/quality improvement, and continuous assessment of laboratory services for all major areas practiced in the contemporary clinical laboratory.

The MLS program at Carolinas College of Health Sciences is accredited by The National Accreditation Agency for Clinical Laboratory Sciences (NAACLS).

NAACLS is committed to being the premier agency for international accreditation and approval of educational programs in the clinical laboratory sciences and related health care disciplines.

The National Accreditation Agency for Clinical Laboratory Sciences (NAACLS)  
5600 N. River Road, Suite 720  
Rosemont, IL 60018-5119  
Phone: 773-714-8880  
Fax: 773-714-8886  
Email: [info@naaccls.org](mailto:info@naaccls.org)

### Program Outcomes (Five Years)

Year	Graduation Rate	Attrition Rate	Placement Rate	Carolinas College MLS ASCP Pass Rate	National MLS ASCP Pass Rate
2017	100%	0%	100%	100%	83%
2018	87%	13%	100%	100%	82%
2019	93%	7%	100%	100%	85%
2020	94%	6%	100%	100%	83%
2021	87%	13%	100%	94%	79%

