



University of
New Haven

SCHOOL OF
HEALTH SCIENCES

Medical Laboratory
Science Program

**University of New Haven
Medical Laboratory Science
Handbook
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PURPOSE OF THE MLS STUDENT HANDBOOK

The purpose of the Student Handbook is to bring together all the various policies and procedures that specifically apply for students in the Department of Medical Laboratory Sciences. Please refer to the [University of New Haven Student Handbook](#) University policies. This MLS handbook does not replace any official University policy, publication, or procedure. All Students must be familiar with and follow all rules and regulations of the University.

The student is responsible to complete all courses necessary to successfully satisfy the requirements of the Medical Laboratory Science Program and to complete all forms, applications, and University requirements for graduation. The Department of Medical Laboratory Sciences cannot and will not be responsible for the student meeting all requirements and deadlines.

Note: The content of the MLS Student Handbook may change at any time. The department faculty reserves the right to make changes and give public notification of such as deemed necessary.

The policies, procedures, and program requirements outlined in this handbook are in effect as of Fall 2020. Entering students are responsible for program requirements in effect at the time of initial enrollment. Policies and procedures are subject to change and are communicated to all Medical Laboratory Sciences students upon approval by the MLS faculty.

INTRODUCTION TO THE UNIVERSITY OF NEW HAVEN (UNewHaven) BS MEDICAL LABORATORY SCIENCE PROGRAM

In keeping with the university mission statement, the Medical Laboratory Science (MLS) program is a professional program that serves individuals who are seeking healthcare careers that develop their naturally scientific, analytical, and curious nature. The curriculum consists of basic science, general education, and profession specific courses that include experiential, collaborative and discovery- based learning.

The **UNewHaven** MLS program was developed in response to the shortage of medical laboratory scientists in Connecticut and in the nation at large and at the request of multiple local area hospitals and health systems that are experiencing very high vacancy rates in their medical laboratories. With the support of the community, the MLS program seeks to contribute academically prepared graduates with entry level technical competency and professional behaviors, as a solution to the national shortage of clinical laboratory professionals.

Medical Laboratory Science is a growing field with unprecedented demand for graduates. It is anticipated that the Medical Laboratory Science field will grow by 11% by 2026 (BLS, 2019). Demand for MLS professionals is a result of the aging of our population and the increasing sophistication and volume of medical laboratory tests. Although automation of some medical laboratory tasks has taken place, there is still a strong need for graduates who have the analytical, laboratory, and clinical knowledge to effectively work in and manage clinical laboratories.

The UNewHaven MLS program is currently applying for accreditation/approval through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). A student's eligibility to take some certification examinations may depend on whether the program achieves "serious applicant" status.

OVERVIEW OF THE PROFESSION

Medical laboratory scientists (MLS) are also known as clinical laboratory scientists (CLS) or medical technologists (MT). They are the third largest medical profession after doctors and nurses and play a significant role in the diagnosis, treatment, and management of patients. Medical laboratory scientists perform complex testing using sophisticated instruments to detect diseases and monitor treatment. 75% of medical decisions, diagnosis, treatment, and evaluations, are based on the interpretations of laboratory test results.

NAACLS Description of the Medical Laboratory Scientist profession

<https://www.naacls.org/NAACLS/media/Documents/2012Standards.pdf>

The medical laboratory scientist is qualified by academic and applied science education to provide service and research in clinical laboratory science and related areas in rapidly changing and dynamic healthcare delivery systems. Medical laboratory scientists perform, develop, evaluate, correlate, and assure accuracy and validity of laboratory information; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients. The medical laboratory scientist has diverse and multi-level functions in the principles, methodologies and 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.

Medical laboratory scientists possess the skills necessary for financial, operations, marketing, and human resource management of the clinical laboratory.

Medical laboratory scientists practice independently and collaboratively, being responsible for their own actions, as defined by the profession. They have the requisite knowledge and skills to educate laboratory professionals, other health care professionals, and others in laboratory practice as well as the public.

The ability to relate to people, a capacity for calm and reasoned judgment and a demonstration of commitment to the patient are essential qualities. Communications skills extend to consultative interactions with members of the healthcare team, external relations, customer service and patient education.

Medical laboratory scientists demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community.

NAACLS Description of Entry Level Competencies of the Medical Laboratory Scientist

At entry level, the medical laboratory scientist will possess the **entry level competencies** necessary to perform the full range of clinical laboratory tests in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunochemistry/Transfusion medicine, Microbiology, Urine and Body Fluid Analysis and Laboratory Operations, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms.

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.

At entry level, the medical laboratory scientist will have the following basic knowledge and skills in:

- A. Application of safety and governmental regulations and standards as applied to clinical laboratory science.
- B. Principles and practices of professional conduct and the significance of continuing professional development.
- C. Communications sufficient to serve the needs of patients, the public and members of the health care team.
- D. Principles and practices of administration and supervision as applied to clinical laboratory science.
- E. Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services.
- F. Principles and practices of clinical study design, implementation, and dissemination of results.

UNewHaven MLS PROGRAM DESCRIPTION

Graduates of the BSMLS program will be prepared to work in clinical, forensic, and research laboratories, hospitals, clinics, doctor's offices, blood banks, fertility centers, government service such as the public health service, medical manufacturing, and supply companies. They will also be qualified to work in veterinary laboratories, technical sales, instrument service, management, teaching, and medical writing. Since the curriculum will emphasize an understanding of laboratory methods and diagnostic interpretation, graduates of the UNewHaven MLS program will also qualify for entry to various Graduate programs.

Students will take a wide range of courses to prepare them to work in the health care industry. The School of Health Sciences core curriculum provides students with a broad, interdisciplinary understanding of how prevention, health policy, and person-centered care affect all health professionals. Our program of study consists of 125 credits of coursework designed to provide the knowledge and technical skills necessary to qualify an individual for work in a diagnostic clinical laboratory, in research, or in industry.

Students complete two years of pre-professional courses in science and general education and two years of professional medical laboratory science coursework. The professional course work includes didactic courses, student laboratory instruction, and clinical experience rotations.

Beginning in the freshman year, students will take biological and physical science coursework to prepare for their pre-clinical medical laboratory science classes.

In the junior year and the first semester of the senior year, students will complete pre-clinical medical laboratory science courses that cover the major areas of medical laboratory work.

During the fall and spring semester of the senior year, students complete a clinical internship in a local area health care organization or laboratory where students can practice their laboratory skills in Hematology/Hemostasis, Clinical chemistry, Blood Bank and Microbiology, under the supervision of a board-certified medical laboratory technologist/clinical laboratory scientist. Other sub-specialty areas for clinical rotation will depend on the hospital. All students will complete a capstone project and will prepare for the board certification examination.

Upon completion of the program, students will be eligible to sit for the American Society of Clinical Pathologist Board of Certification (ASCP BOC) exam to become a board-certified Medical Laboratory Scientist and will be qualified to work as entry level Medical Laboratory Scientists. Graduation from the MLS program will not be dependent on students passing any external certification exam.

UNewHaven MLS program mission is to provide a rigorous, competitive undergraduate training program to prepare students to become ASCP certified medical laboratory scientists with theoretical knowledge and practical, critical thinking, research, and communication skills.

UNewHaven MLS program vision is to become a destination program for medical laboratory science in the region recognized for quality faculty, strong industry partnerships, and successful graduates. All graduates from the MLS program will become competent, ethical, certified MLS professionals prepared to become an essential member of the healthcare team.

Goals of the MLS program are to:

1. Prepare students for entry level position as a Medical laboratory scientist.
2. Prepare students to pass the ASCP certification examination.
3. Provide students with the tools to honor professionalism and ethical practice.

4. Provide a curriculum that develops critical and analytical thinking skills through an integrative approach of instruction, research, and evidence-based resources.
5. Prepare students to become lifelong learners.
6. Promote and support excellence in faculty performance in teaching, scholarship, and service.

The UNewHaven MLS program has the following learning outcomes that will be measured and assessed. Graduates of the MLS program will:

1. Demonstrate skills related to the field of medical laboratory science.
2. Test their MLS knowledge through the ASCP certification examination.
3. Perform practical skills to conduct competent laboratory testing.
4. Demonstrate effective skills in communication, systematic thought, and writing.
5. Support positive professional ethics, attitudes, and practices.
6. Integrate research skills applicable to medical laboratory diagnostics and the improvement of patient care.
7. Value a commitment to lifelong learning and professional development.

The MLS Program objectives are:

Professional Communication: To interact and communicate effectively by presenting information in oral and written formats, collaborating with professionals, peers, and clients, expressing ideas clearly, and giving and receiving feedback to serve the needs of patients, the public and members of the health care team.

Professional Competence: To possess knowledge, skills, and abilities to acquire an entry level position as a Medical Laboratory Scientist and to successfully complete the ASCP BOC MLS examination.

Professional Ethics and Conduct: To learn to treat patients and colleagues with respect, care, and thoughtfulness, to perform duties in an accurate, precise, timely and responsible manner, to maintain strict confidentiality of patient information and test results and to exercise professional judgment, skill and care while meeting established standards of the MLS profession.

Professional and Personal Development: To continuously improve and apply medical laboratory skills and knowledge and share such with colleagues, other members of the health care community and the public.

Who should consider this program:

Students interested in the MLS program can be high school or associate degree graduates interested in entering a service profession that is health related. These students should have a strong science background and an interest in laboratory work. Other students who have

completed the appropriate pre-requisites may also request entry to the MLS program. Ideally MLS applicants should have demonstrated an aptitude for life science, hard science, and mathematics coursework in their prior educational experience. Students with a bachelor's degree in a science related field with the appropriate pre-requisites may also qualify to enter the 3rd year of program.

ADMISSION REQUIREMENTS

For program admissions and Special Requirements see Appendix A

A 2.7 GPA and successful completion of all prerequisites are needed for entry into the 3rd year of the MLS program. Students in the BSMLS program must maintain a 2.7 GPA or above for placement in the clinical rotations.

Students completing the BSMLS program must complete a capstone course (MLSC 4450). This course is an opportunity for students to integrate their knowledge and experience into a culminating research project, clinical project, or practical experience. Students will show connections between concepts and skills in earlier health related coursework and their capstone project and clinical experiences.

The BSMLS program requires that all MLS students will complete clinical rotations in Hematology/Hemostasis, Clinical chemistry, Blood Bank and Microbiology. These rotations are expected to take place at various hospitals. Students must complete all clinical rotations in their final year of the program with 80% or better.

Students must also complete a final comprehensive exam with a grade of 80% or better. Students will have an opportunity to retake the exam at least once before graduation. Failure to pass the comprehensive exam and to pass the clinical rotations are grounds for dismissal from the program. Dismissal from the MLS Program is not equivalent to dismissal from the university. The student may appeal through the University's grievance procedure. The student may reapply to the MLS Program for the possibility of admittance into a future cohort.

List of courses:	Number of credits
Intro to Medical Laboratory Science	3
Molecular Biology	4
Immunology	3
Clinical Chemistry	4
Lab operations, regulations, and compliance	3
Blood coagulation, Hemostasis and Urinalysis with lab	4
Hematology with lab	4
Phlebotomy and sample processing	2
Clinical Microbiology for Med Lab Sci	4
Immunohematology and transfusion medicine	3

Clinical seminar I education	2
Clinical seminar II education	3
Clinical practicum I, II	8
Capstone project	3

MLS TECHNICAL STANDARDS/ESSENTIAL FUNCTIONS

Technical Standards/Essential Functions make up the non-academic requirements of the profession that all students must demonstrate to succeed in the UNewHaven MLS program. After reading the Technical Standards/Essential Functions, taking MLSC 1100, and meeting with the Program Director, students may sign the Technical Standards/Essential Functions form which will be kept in their MLS department file. Students who sign the form (Appendix B) accept the requirements and are aware of the technical standards/essential functions needed to succeed in the MLS Program. Once admitted to the program, failure to meet any of the Essential Functions may result in dismissal from the program.

Technical Standards/Essential Functions required for the MLS program:

Technical Standards/Essential Functions required for successful completion of the MLS program at the University of New Haven are:

Professional skills:

Maintain professional decorum and composure in a wide variety of situations.
 Maintain confidentiality and integrity.
 Follow directions, be able to make decisions, prioritize tasks, and work on multiple tasks simultaneously.
 Work independently and in cooperation with others.
 Apply acquired learned skills and knowledge to new situations.
 Work with potential biologic, chemical, radiologic, mechanical, and electrical hazards.
 Maintain personal hygiene and neatness appropriate to the professional workplace.
 Achieve regular, reliable, and punctual attendance at classes and regarding their clinical responsibilities.

Communication skills:

Communicate effectively and efficiently with coworkers and members of the healthcare team.
 Read and comprehend written material.
 Record information accurately and clearly.

Technical skills:

Complete fine repetitive movements such as pipetting
 Manipulate lab instruments.

Demonstrate proficiency to work with flammable and infectious materials, hazardous chemicals, and electrical equipment.

Demonstrate proficiency in all areas of the clinical lab.

Work in areas with distracting noises, unpleasant odors and in close proximity to fellow workers.

Perform all diagnostic procedures in the clinical lab.

Perform delicate manipulations of clinical specimens, clinical lab equipment, tools, and instruments.

Perform diagnostic procedure and venipuncture safely and accurately.

Adhere to universal precaution measures and meet safety standards applicable to the clinical laboratory.

Accurately identify, describe, and record fine details of clinical specimens both macroscopically and microscopically,

Read and interpret charts, graphs, and labels.

Read and interpret instrument panels and printouts.

Independently perform all aspects of diagnostic procedures in the clinical lab and report results accurately and timely.

Student Advising and Guidance

The MLS advisors/faculty and other academic advisors are available to provide guidance for course registrations. It is important that students complete the MLS coursework in a deliberate and systematic way to graduate on time. Students who are completing extra programs such as minors or pre-med concentration etc. should carefully schedule the completion of these courses.

The MLS director and faculty are available to advise students on program policy comprehension, academic issues, professional goals, or personal issues. If a student is experiencing a challenge that is affecting academic performance, whether it is an illness, a financial crisis, or some other concern, the student should speak with the Program Director as soon as possible. The Program Director will guide students towards applicable policies which may address issues affecting academic performance. All advising and counseling sessions are confidential. All decisions shall be made impartially. Students are encouraged to use the University of New Haven resources and personnel for professional counseling. The MLS program and the UNewHaven are committed to impartiality and confidentiality of formal and informal information shared by students. Refer to the [University of New Haven Student Handbook](#) for additional information on Student success and advising, and counseling and psychological services.

Academic Probation and Suspension: The UNewHaven MLS program follows the UNewHaven Academic Standards concerning academic probation. Policies regarding registration restrictions and appeals can be found in the [University of New Haven Student Handbook](#).

Dismissal from the MLS program

Potential causes for dismissal include but are not limited to:

- Violation of the University of New Haven Student Code of Conduct and other university policies per the [University of New Haven Student Handbook](#).
- Any act of unsafe behavior
- Excessive absence or tardiness in any MLS course including clinical rotations.
- Inability to meet general course competencies.
- Inability to complete the clinical courses as scheduled because of health issues.
- Dismissal from a clinical rotation by an assigned healthcare facility for any reason per the affiliation agreement
- Other issues may arise where it is considered necessary to dismiss a student.
- Failure to obtain a minimum of 80% in any two MLS course or receiving less than 80% twice in any one MLS course.
- Failure to obtain a minimum of 80% on the final comprehensive exams of individual MLSC courses or the final comprehensive exam for the MLS program.

CLINICAL PRACTICUM

MLS students will complete a clinical practicum at an affiliated clinical laboratory. The clinical rotation will prepare students for practice in a clinical laboratory and is designed to enhance the student's entry level competencies. During the rotation, the student will be exposed to the daily operations of the laboratory under the supervision of a certified experienced technologist. Students will rotate through the main sections of a clinical laboratory. These areas are Clinical Chemistry, Hematology/Hemostasis, Microbiology, and Immunohematology/Transfusion medicine. Students may be exposed to other subspecialty areas based on the clinical site. Student learning experiences are not substituted for the work of the staff. Students may perform service work outside of academic hours, but this is not needed or allowed to fulfill practicum requirements.

All general education courses and appropriate MLSC courses must be successfully completed before a student will be eligible for enrollment into clinical practicum courses.

Clinical curriculum

Through well-planned and supervised rotation, students will gain experience in the following areas of laboratory science:

Clinical Chemistry: The chemical analysis of blood and body fluids.

Serology and immunology: The detection, measurement and identification of antigens or antibodies produced by the immune system in response to the introduction of a foreign substance.

Hematology/Hemostasis. The study of the cellular components of blood and the mechanisms of hemostasis (blood clotting).

Urinalysis: The analysis of urine for cells, casts, protein, cholesterol, and glucose to aid in the diagnosis and treatment of kidney disease, diabetes, urinary tract infections, stone formation and other diseases

Microbiology. The culture, identification, and susceptibility testing of agents of infectious disease (viruses, parasites, bacteria, and fungi) by traditional biochemical techniques and molecular methods.

Immunoematology/Blood Bank. The science and technology used to prepare blood products and determine the suitability of blood products for transfusion.

Students can also complete supplemental laboratory rotations in molecular diagnostics and virology and other subspecialty area based on availability at the clinical rotation site.

After completion of the clinical practicum, students will be able to:

- understand the responsibilities, roles, and functions of the Medical Laboratory Scientist
- practice skills learned in student laboratories.
- relate lab test results to patient conditions.
- report accurate and precise results.
- practice skills in problem-solving and troubleshooting.
- perform quality control procedures.
- operate and maintain various instruments used in routine clinical testing.
- learn to adapt easily to new procedures.
- develop organizational skills.

Assignment to clinical rotations

Students will be given a form on which to rank clinical site preferences. Although student preference will be considered, assignments will also depend on recommendations from MLS faculty and clinical affiliate education coordinators. Students are not guaranteed their first choice in clinical assignments. The decision of the faculty is final. Students will be notified of their clinical site assignment prior to the end of the spring semester. Students will receive a rotation schedule for each semester for which assignments are required. Students will keep this schedule for their records.

If placements are difficult due to the lack of available slots, there will be a priority list that will be based on projected date of graduation, progress in preclinical courses, and willingness to graduate. Priority will be given to students who are ready for graduation immediately upon completion of practicum courses. Assignments will be based on academic performance, focusing on cognitive, psychomotor, and affective behaviors. Every attempt will be made to place all students and avoid delaying student graduation.

A student who does not pass an assigned clinical rotation will be placed at the end of the priority list and must wait for the next available rotation if there are no other violations of the program's continuance policy.

Clinical rotation attendance is mandatory. See Appendix C for clinical rotation attendance policy.

Clinical Instructors:

Clinical instructors at the clinical affiliate sites are seasoned Medical Technologists/Medical Laboratory Scientists who have a dedication to the profession and to students.

Review of Didactic Course Materials

It is the responsibility of the MLS students to review the didactic course materials in preparation for entering clinical rotations. This includes lecture notes, textbooks, lab materials and clinical course objectives. Other sources that can be used includes the ASCP BOC Review and other review materials. These resources can be used to prepare for clinical seminars and the national certification.

Pre-assessments will be given before students start each clinical rotation. Students will be required to make up deficiencies in a discipline before entering a clinical rotation if an acceptable grade of 80% is not achieved. Additional assessments will be given during each practicum according to the schedule set by the UNewHaven course director. All testing occurs in proctored environment. Students are expected to use their own computers and have access to the Internet.

CLINICAL SITE INFORMATION

Information about the Clinical Affiliates is available in the department's office. Students must not contact clinical sites directly. Such contacts are considered annoying and detrimental and may jeopardize their rotation request.

List of clinical facilities include:

VACT Healthcare system
Yale Hospital systems (pending)
Griffin Hospital
Hartford Healthcare Systems

Affiliation agreement with clinical sites: Contractual affiliation agreements are maintained with all clinical affiliate sites. **Each agreement stipulates that the clinical facility must have enough staff so that the student do not perform service work in lieu of staff. Students may be employed by clinical affiliates. However, employment must be scheduled outside of scheduled**

clinical practice hours and must not conflict with the student's learning experience and/or performance evaluation.

Requirements for Clinical Placement

To attend clinical rotations students must supply all the required documentation for the site they are assigned to and pay the necessary fees required for obtaining said documentation. Documents must be obtained within specified time intervals. During orientation, on the first day of the Clinical Year, students will be instructed on the timeline for obtaining required documents.

Clinical affiliation hospitals may require the following for participation in a clinical rotation:

1. Social Security Number: Must have a United States Social Security Number.
2. International Students must provide office photocopies of current I-20 document, the picture ID page of passport, and the US visa page from passport.
3. Criminal Background Check: Must supply documentation of an acceptable criminal background check.
4. Drug Screen: Must provide documentation of an acceptable drug screen.
5. Medical Clearance: Must submit the "Statement of Medical Clearance" form signed by a US Board Certified health care provider.
6. Immunizations: Must submit the "Documentation of Immunizations/Immune Status" for required vaccines.
7. Student Trainee License: Must be willing to apply and pay the fee for trainee license if required by the state where clinical practicum experience is assigned.
8. HIPAA privacy training certificate
9. CPR certificate
10. Attendance of hospital requisite orientation sessions

Hours

For most of your clinical rotation, the learning schedule includes eight-hour days, four days a week. Hours vary from 6:30 a.m. to 5 p.m.

Housing:

Although some clinical sites are nearby the University, other clinical sites may not be. The student is responsible for locating housing in the case of clinical sites that are not close by and are not accessible by public transportation. Coordination and financial arrangements are also the responsibility of the student.

Clinical rotation transportation

Transportation to/at the assigned clinical site is the responsibility of each student. Although every student is assigned to a primary clinical site, many sites will include rotations at another facility. Thus, students must plan to travel to other locations. The clinical site is not responsible for supplying transportation.

OPERATIONAL POLICIES

The UNewHaven MLS program will follow fair practices:

- Student recruitment and admission will be non-discriminatory per existing governmental regulations and those of the sponsor.
- Faculty recruitment and employment practices will be non-discriminatory following existing governmental regulations and those of the sponsor.
- The granting of the degree or certificate will not be contingent upon the student passing any type of external certification or licensure examination.
- A teach out plan will be developed and sent to NAACLS within 30 days of the official announcement of the closure of the program.
- Service work by students in clinical settings outside of academic hours will be noncompulsory.
- Students may not be substituted for regular staff during their student experiences.

PROGRAM CLOSURE TEACH OUT PLAN

NAACLS requires the program to have a “teach out” plan in case the program unexpectedly closes due to natural or unnatural disasters or permanent closure. Intentional closure of the program will be communicated to all students at once. In case of disaster the university will inform students of a plan for continuation of their education as soon as that information is available. NAACLS will be notified and a teach out plan will be provided to them within 30 days of the official announcement of program closure.

Prospective students:

- In the case of permanent closure students will be informed that the program will not take a new cohort due to program closure.
- In the case of a natural or unnatural disaster the program will work with other laboratory science programs to continue education and training until training can resume at the college.
- Students will be counseled in applying to other local programs.
- Program closure information will be posted on the program website.

Current students:

- Students will be informed of program closure.
- In the case of a natural or unnatural disaster the program will work with other laboratory science programs to continue education and training until training can resume at the college.

- In case of a mandated permanent closure currently enrolled students will be allowed to complete program.
- The Program Director will be designated to clear students applying for the certification exam.

PROFESSIONAL MEMBERSHIPS

Students are encouraged to enroll as student members in one or more of the professional organizations within MLS. The organizations serve to meet the interests and needs of the members including continuing education and information on laws and regulations pertinent to the field. Many of these organizations offer student membership rates and students are entitled to all privileges and benefits designated to the student member. This includes the receipt of professional journals, announcements of local, regional, and national meetings, and bulletins. Following is a list of some of the membership agencies and phone numbers:

American Society of Clinical Laboratory Science (ASCLS)

1861 International Drive, Suite 200. McLean, VA 22102
Ph. 571.748.3770
www.ascls.org

American Society for Clinical Pathology (ASCP)

33 W. Monroe Suite 1600. Chicago, IL 60603
Ph: 312-541-4999
www.ascp.org

American Association for Blood Banks (AABB)

8101 Glenbrook Road. Bethesda, MD 20814
Ph: 301-215-6489
www.aabb.org

American Association for Clinical Chemistry (AACC)

1850 K Street, NW, Suite 625. Washington, D.C. 20006
Ph: 800-892-1400
www.aacc.org
<http://www.ascp.org>

American Society for Microbiology (ASM)

1752 N. Street N.W. Washington, D.C. 20036-2904
Ph: 202-737-3600
www.asm.org

CERTIFICATION EXAMS

Eligibility

The Medical Laboratory Science Program is designed to meet the eligibility requirements for US MLS Certification. This certification is offered through the American Society of Clinical Pathologists (ASCP) Board of Certification (BOC).

Upon successful completion of the MLS Program, the student will be eligible to sit for this examination and is expected to become certified within 3 months or as soon as is practical.

Application form

Eligible applicants must submit an online application for the ASCP examination.

For US Certification information and instructions on how to apply, please go to:

<https://www.ascp.org/content/board-of-certification/getcertified#tabs-introduction>

Fee

Payment of an application fee is required upon submission of the online application. The cost of the Board of Certification (BOC) examination is determined by the agency (ASCP) and is currently as follows:

BOC (ASCP) \$240.00 (as of 8/3/20)

(Application fee is subject to change without notice)

International Certification and State Licensures

Some states require a license to work, which may require successful completion of additional coursework, clinical practicum time, or a state-administered examination. The MLS Program does not guarantee provision of appropriate course work/experience/practica to meet certification or licensure requirements other than those of the ASCP. It is the student's responsibility to complete the additional requirements necessary to work in these states. Each state provides its own guidelines for licensing, which are available on state agency websites such as the state specific department of health.

For additional information on states licensure see <https://www.ascls.org/advocacy-issues/licensure>

Certification exam schedule

The ASCP BOC exam is offered as a computer adaptive test (CAT) through the year and at designated examination sites.

For scheduling information see <https://www.ascp.org/content/board-of-certification/getcertified#tabs-scheduling>

Student responsibility

Each eligible student handles all aspects of the ASCP BOC exam. Student responsibilities include accessing the application on-line (see link below), paying the exam fee, scheduling the exam, transportation to the testing site, consequences for tardiness or absenteeism, and retakes if he/she fails the exam. Please follow all the instructions as indicated on the testing website.

To apply online go to: <https://www.ascp.org/content/board-of-certification/getcertified#tabs-applying>

Appendix A

UNIVERSITY OF NEW HAVEN MEDICAL LABORATORY SCIENCE (MLS) PROGRAM ADMISSION CRITERIA AND PROCEDURE BACHELOR OF SCIENCE DEGREES IN MEDICAL LABORATORY SCIENCE

Full-Time Student Freshman Medical Lab Science Program Status

*Admission Criteria and Procedure: Full-Time Freshman Students

1. Complete and submit an online Undergraduate Application for Admission.
2. Submit official secondary/high school transcript including:
 - Science grades: must have a “B” grade or better in biology and chemistry
 - Math grades: must have a “B” grade or better in all math courses
 - GPA: 2.9 / higher on a 4.0 scale
3. OPTIONAL: Official SAT or ACT Scores
 - Submission of SAT or ACT test scores for admission is optional for incoming undergraduate and transfer student applications.
4. Submit at least one (1) letter of recommendation.
5. An interview with the MLS Program Director is optional.

- The Directors and Admissions Counselors in the Office of Undergraduate Admissions, in consultation with the MLS Program Director, select MLS students utilizing the MLS Program Admission Criteria and Procedures.
- After completion of the Sophomore year (see academic worksheet), students will be evaluated by the MLS Academic Standards Committee: A cumulative grade point average of 2.7 / higher on a 4.0 scale is required for continuance in the Junior-level MLSC courses of the MLS program.
- For additional information about the MLS program access www.newhaven.edu/health/sciences

*Admission Criteria and Procedure: Full-Time Transfer Students who have completed fewer than 12 credits from their previous college(s):

1. Complete and submit an online Undergraduate Transfer Application for Admission.
2. Submit official secondary/high school transcript including:
 - Science grades: must have a “B” grade or better in biology and chemistry
 - Math grades: must have a “B” grade or better in all math courses
 - GPA: 2.9 / higher on a 4.0 scale
3. OPTIONAL: Official SAT or ACT Scores
4. Submit at least one (1) letter of recommendation.
5. Submit official transcripts from all colleges/universities you attended:
 - a. Transfer credits to be accepted with a “C-” grade or better and/or with the department chair’s approval.
 - b. All transfer math and science courses require a “C” grade or better.
 - c. College GPA: 2.7 / higher on a 4.0 scale; or demonstrates evidence of recent successful academic college/university performance.

- The Directors and Admissions Counselors in the Office of Undergraduate Admissions, in consultation with the MLS Program Director, select MLS students utilizing the MLS Program Admission Criteria and Procedures.
- After completion of the Sophomore year (see academic worksheet), students will be evaluated by the MLS Academic Standards Committee: A cumulative grade point average of 2.7 / higher on a 4.0 scale is required for continuance in the Junior-level MLSC courses of the MLS program
- For additional information about the MLS program access www.newhaven.edu/health/sciences

6. An interview with the MLS Program Director is optional.

***Admission Criteria and Procedure: International Students**

1. Complete and submit an online Undergraduate International Application for Admission.
2. **For First-Year Applicants** (Students who just finished, or in the process of finishing, secondary/high school): Submit OFFICIAL/notarized/attested/or certified copies of ORIGINAL senior secondary/high school records. **Must adhere to the admission criteria and procedure for the full-time freshman students listed above.**

For Transfer Applicants: Students who have attended any post-secondary institution (college/university): Submit OFFICIAL/notarized/attested/or certified copies of ORIGINAL senior secondary/high school records (see 2.a. above) AND ALL post-secondary school (university/college) records. **Adhere to the admission criteria and procedure for full-time transfer students above.**

- All non-native English language speakers must demonstrate English language competency by providing a TOEFL score of 80 on the internet-based test (iBT), IELTS score of 6.5, or official SAT or ACT Scores.
- An interview with the MLS Program Director is optional.

Full-Time Transfer Students/Sophomore Med Lab Science Program Status

***Admission Criteria and Procedure: Full-Time Transfer Students** who have completed **more than 12 credits** from their previous college(s):

1. Complete and submit an online Undergraduate Transfer Application for Admission.
2. Submit official transcripts from all colleges/universities you have attended:
 - a. Transfer credits to be accepted with a “C-” grade or better and/or with the department chair’s approval
 - b. All math and science courses require a “C” grade or better.
3. College GPA: 2.7 / higher on a 4.0 scale; or demonstrates evidence of recent successful academic college/university performance.
4. An interview with the MLS Program Director is optional.

- The Directors and Admissions Counselors in the Office of Undergraduate Admissions, in consultation with the MLS Program Director, select MLS students utilizing the MLS Program Admission Criteria and Procedures.
- After completion of the Sophomore year (see academic worksheet), students will be evaluated by the MLS Academic Standards Committee: A cumulative grade point average of 2.7 / higher on a 4.0 scale is required for continuance in the Junior-level MLSC courses of the MLS program
- For additional information about the MLS program access www.newhaven.edu/health/sciences.

- The Directors and Admissions Counselors in the Office of Undergraduate Admissions, in consultation with the MLS Program Director, select MLS students utilizing the MLS Program Admission Criteria and Procedures.
- Compiled by Carleta B Maurice MS, MT (ASCP) Director, MLS Program, PIR, in accordance with the University of New Haven Office of Undergraduate Admissions.
- For additional information about the MLS program access www.newhaven.edu/health/sciences.

Appendix B

University of New Haven Medical Laboratory Science Program Verification of eligibility Form

Technical Standards/Essential Functions required for the MLS program:

Technical Standards/Essential Functions required for successful completion of the MLS program at the University of New Haven are:

Professional skills:

Maintain professional decorum and composure in a wide variety of situations.

Maintain confidentiality and integrity.

Follow directions, be able to make decisions, prioritize tasks, and work on multiple tasks simultaneously.

Work independently and in cooperation with others.

Apply acquired learned skills and knowledge to new situations.

Work with potential biologic, chemical, radiologic, mechanical, and electrical hazards.

Maintain personal hygiene and neatness appropriate to the professional workplace.

Achieve regular, reliable, and punctual attendance at classes and regarding their clinical responsibilities.

Communication skills:

Communicate effectively and efficiently with coworkers and members of the healthcare team.

Read and comprehend written material.

Record information accurately and clearly.

Technical skills:

Complete fine repetitive movements such as pipetting

Manipulate lab instruments.

Demonstrate proficiency to work with flammable and infectious materials, hazardous chemicals, and electrical equipment.

Demonstrate proficiency in all areas of the clinical lab.

Work in areas with distracting noises, unpleasant odors and in close proximity to fellow workers.

Perform all diagnostic procedures in the clinical lab.

Perform delicate manipulations of clinical specimens, clinical lab equipment, tools, and instruments.

Perform diagnostic procedure and venipuncture safely and accurately.

Adhere to universal precaution measures and meet safety standards applicable to the clinical laboratory.

Accurately identify, describe, and record fine details of clinical specimens both macroscopically and microscopically,

Read and interpret charts, graphs, and labels.

Read and interpret instrument panels and printouts.

Independently perform all aspects of diagnostic procedures in the clinical lab and report results accurately and timely.

I have read and understood the Technical Standards/Essential Functions required for successful completion of the MLS program at the University of New Haven. I am aware that failure to meet any of the Technical Standards/Essential Functions may result in dismissal from the program.

Complete MLSC 1100 Date: _____

Read the UNewHaven MLS Handbook Date: _____

Met with Program Director Date: _____

Student's name print _____

Student Signature _____ Date _____

Program Director's name print _____

Program Director signature _____ Date _____

Appendix C

Clinical Rotation attendance policy

Attendance is mandatory. Unexcused absences are not permitted.

Students **must inform** the program director/clinical coordinator, and the appropriate clinical laboratory supervisor/preceptor (to which they are assigned) of any planned absences and absences arising from an emergency.

Students must communicate lateness or attendance to the clinical site in accordance with the specific policies of the clinical site.

Failure to communicate an absence as directed may be considered an unexcused absence and may be grounds for failure of the rotation.

Students must obtain appropriate permission for a requested absence in advance, from the course director and the clinical laboratory supervisor/preceptor.

For excused absences in a 4-week rotation: Students may make up missed days if performance on days attended is satisfactory and if students make up the excess days in a manner that is acceptable to the clinical site, clinical coordinator and/or the program director.

- 1-2 days-no make-up time required (if performance on days attended is satisfactory).
- 3-4 days -remediation required (per the agreement of the clinical site).
- 4 days-repeat of rotation will be required (based on availability at the clinical site).

Frequent absences, regardless of the reason, may be used as one component in calculating a student's overall grade.

Please note the attendance policy per the [UNewHaven Handbook](#).

Misrepresenting absences or absence requests is a breach of professional ethics and will be treated as an Academic Integrity Violation.