

Medical Laboratory Sciences

COLLEGE OF PHARMACY

Student Handbook 2023-2024



UNIVERSITY OF MINNESOTA

*The policies, procedures, and program requirements outlined in this handbook are in effect as of **Summer / Fall 2023**. 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.*

The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.

Inquiries regarding compliance may be directed to the Director, Office of Equal Opportunity and Affirmative Action, University of Minnesota, 274 McNamara Alumni Center, 200 Oak Street S.E., Minneapolis, MN 55455, (612) 624-9547, eoaa@umn.edu or eoaa.umn.edu

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WELCOME TO THE MLS PROGRAM



Congratulations on your admission into the Medical Laboratory Sciences Program! This Student Handbook provides you with information about the policies and procedures that are important to you as you attend our program. Make sure to keep a copy of this Handbook for future reference.

Background

The **Medical Technology** program was established at the University of Minnesota in 1922 to prepare people for professional work in laboratory medicine and for advanced study in the basic and applied sciences. This program attempts to provide both a strong foundation in basic sciences and competent practice in the medical laboratory. The program name was changed to **Clinical Laboratory Sciences (CLS)** in 2007 and in 2014 to **Medical Laboratory Sciences (MLS)** to reflect the current certification terminology.

The MLS program is administratively located in the College of Pharmacy (previously in the Center for Allied Health Programs or CAHP) at the University of Minnesota. The mission of Medical Laboratory Sciences Program is to develop an innovative approach for preparing medical laboratory professionals for Minnesota's healthcare workforce. The program works in collaboration with higher education and health delivery systems across Minnesota and beyond to create and deliver signature innovative, sustainable, accessible, responsive and learner-centered educational programs

Center for Allied Health Programs Offices

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Overview of the MLS Profession

Medical laboratory scientists (MLS), previously known as clinical laboratory scientists or medical technologists, play a crucial role in the diagnosis, treatment and management of patients. They are the third largest medical profession (after physicians & nurses). Medical laboratory

scientists perform complex testing using sophisticated instruments to detect diseases and monitor treatment. Approximately 75% of medical decisions, diagnoses, treatment and evaluations, are based on the interpretations of laboratory test results. In addition to the medical laboratory setting, graduates of this program are qualified to work in a variety of other laboratory facilities such as research, environmental, biomedical, forensics, or public health laboratories. With the curriculum emphasis on developing quality understanding of laboratory methods and their diagnostic interpretation, our graduates are also excellent candidates for graduate degree programs or graduate medical professional schools.

Approximately 70 percent of medical laboratory scientists (MLS) work in hospital laboratories. In small hospitals, a MLS practitioner can expect to be a generalist, working in all laboratory sections. In a large hospital, a MLS may specialize in one section, such as microbiology or transfusion medicine. Typical areas of medical laboratories include hematology, coagulation, microbiology, chemistry, urinalysis, and transfusion medicine. Large institutions, such as those in medical centers, may have additional specialized laboratories in cytogenetics, toxicology, endocrinology, immunophenotyping, fertility testing, tissue typing and others. Other sites of employment include basic and applied research, industry, clinics, public health, reference and forensic laboratories.

Description of the MLS Profession

According to the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), our professional program accrediting agency, 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 professionals 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.

Career Competencies for Laboratory Practitioners

Because laboratory practitioners are essential members of the healthcare team, there are competencies required of professional program graduates. Graduates of the MLS program should be ready to become active, functional members at the levels prescribed for those entering the profession. Graduates should continue to meet the Technical Standards (Essential Functions) required while in the academic program while continuing to evolve into an experienced practitioner. The following descriptive levels are used to rate the career entry level competencies and therefore graduation competencies of a MLS practitioner.

Entry Level Competencies of the Medical Laboratory Scientist

When entering the profession, 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, Immunohematology/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.

In addition to the technical knowledge and skills mentioned above, at entry level, the medical laboratory scientist will also have the following basic knowledge and skills in:

- A. Application of safety and governmental regulations and standards as applied to medical 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 medical 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.

Professional Competencies in MLS

In addition to the scientific knowledge, skills, and abilities that will be learned in the MLS program, it is also essential that we ensure that all students are able to enter the world of the medical professional. To provide instruction and guidance, the Handbook includes information about the Technical Standards (Essential Functions); the MLS Program Honor Code; the ASCLS Professional Code of Ethics; and the Pledge to the Profession as a foundation and framework to attain the necessary behavioral competencies.

ASCLS Professional Code of Ethics

Preamble

The code of ethics of the American Society for Clinical Laboratory Science sets forth the principles and standards by which Medical Laboratory Professionals and students admitted to professional education program practice their profession.

I. Duty to the Patient

Medical Laboratory Professionals' primary duty is to the patient, placing the welfare of the patient above their own needs and desires and ensuring that each patient receives the highest quality of care according to current standards of practice. High quality laboratory services are safe, effective, efficient, timely, equitable, and patient-centered. Medical Laboratory Professionals work with all patients and all patient samples without regard to disease state, ethnicity, race, religion, or sexual orientation. Medical Laboratory Professionals prevent and avoid conflicts of interest that undermine the best interests of patients.

Medical Laboratory Professionals are accountable for the quality and integrity of the laboratory services they provide. This obligation includes maintaining the highest level of individual competence as patient needs change, yet practicing within the limits of their level of practice. Medical Laboratory Professionals exercise sound judgment in all aspects of laboratory services they provide. Furthermore, Medical Laboratory Professionals safeguard patients from others' incompetent or illegal practice through identification and appropriate reporting of instances where the integrity and high quality of laboratory services have been breached.

Medical Laboratory Professionals maintain strict confidentiality of patient information and test results. They safeguard the dignity and privacy of patients and provide accurate information to patients and other health care professionals. Medical Laboratory Professionals respect patients' rights to make decisions regarding their own medical care.

II. Duty to Colleagues and the Profession

Medical Laboratory Professionals uphold the dignity and respect of the profession and maintain a reputation of honesty, integrity, competence, and reliability. Medical Laboratory Professionals contribute to the advancement of the profession by improving and disseminating the body of knowledge, adopting scientific advances that benefit the patient, maintaining high standards of practice and education, and seeking fair socioeconomic working conditions for members of the profession.

Medical Laboratory Professionals accept the responsibility to establish the qualifications for entry to the profession, to implement those qualifications through participation in licensing and certification programs, to uphold those qualifications in hiring practices, and to recruit and educate students in accredited programs to achieve those qualifications.

Medical Laboratory Professionals establish cooperative, honest, and respectful working relationships within the clinical laboratory and with all members of the healthcare team with the primary objective of ensuring a high standard of care for the patients they serve.

III. Duty to Society

As practitioners of an autonomous profession, Medical Laboratory Professionals have the responsibility to contribute from their sphere of professional competence to the general well-being of society. Medical Laboratory Professionals serve as patient advocates. They apply their expertise to improve patient healthcare outcomes by eliminating barriers to access to laboratory services and promoting equitable distribution of healthcare resources.

Medical Laboratory Professionals comply with relevant laws and regulations pertaining to the practice of Clinical Laboratory Science and actively seek, to change those laws and regulations that do not meet the high standards of care and practice.

Pledge to the Profession (ASCLS)

As a Medical Laboratory Professional, I pledge to uphold my duty to Patients, the Profession and Society by:

- Placing patients' welfare above my own needs and desires.
- Ensuring that each patient receives care that is safe, effective, efficient, timely, equitable and patient-centered.
- Maintaining the dignity and respect for my profession.
- Promoting the advancement of my profession.
- Ensuring collegial relationships within the clinical laboratory and with other patient care providers.
- Improving access to laboratory services.
- Promoting equitable distribution of healthcare resources.
- Complying with laws and regulations and protecting patients from others' incompetent or illegal practice
- Changing conditions where necessary to advance the best interests of patients.

Reference: <http://www.ascls.org/about-us/code-of-ethics>

MLS Program Mission Statement

The mission of the Medical Laboratory Sciences Program (MLSP) is one of innovative teaching, research and service to inspire and empower current and future laboratory scientists to be engaged and ethical professionals able to respond and constructively contribute to complex and diverse environments in laboratory medicine. The primary mission of the MLSP is to enhance the quality of patients' health by:

1. being a leader in medical laboratory science education with special attention to the needs of the State of Minnesota;
2. pursuing and disseminating new knowledge with original and creative research in the practice of medical laboratory science, education and medicine; and
3. providing educational and collaborative opportunities to academic institutions, industry partners and the community.

MLS Program Honor Code

Members of the Medical Laboratory Science Program are expected to engage in behavior that promotes the continuous development and improvement of student's academic experience.

Honesty and integrity inside and outside the classroom are essential components of such an environment and imperative for all members of the community to incorporate into their scholastic pursuits. The Medical Laboratory Science Program Honor Code does not supersede any institutional policies of the University of Minnesota or laws of the State of Minnesota. In addition to the Honor Code, students are also held to the standards set forth in the University of Minnesota's Student Conduct Code. All students agree to the terms of the Medical Laboratory Science Program Honor Code by accepting admission to the Medical Laboratory Science Program and recognize these essentials as core competencies of the profession.

The Medical Laboratory Science Program recognizes several core tenets valued by the community. All faculty and students in the Medical Laboratory Science Program agree to:

- Respect
 - Recognize and value the talents and roles of each individual.
 - Respect any and all diversity (e.g. gender, race, religion, sexual orientation, economic status, culture, identity, background, age, ethnicity, disabilities, family and work situations)
 - Encourage different points of view and the rights of individuals to state them in an atmosphere where dissention is acceptable if delivered in a respectful manner.
 - Treat fellow students, faculty, staff and guests of the Medical Laboratory Science Program with courtesy and respect.
 - Treat clinical faculty, co-workers, patients and families with courtesy and respect.
- Integrity
 - Act honestly and ethically both inside and outside of the classroom.
 - Hold true to values that are consistent with the core tenets of the Medical Laboratory Science Program Honor Code and the ASCLS Code of Ethics.
- Leadership
 - Demonstrate conviction and commitment to take action and to influence positive change.
 - Promote team building, problem solving, and positive conflict resolution.
- Individual Responsibility
 - Demonstrate readiness and willingness to do what it takes to consistently uphold a high level of professional conduct.
 - Recognize that all individuals are accountable for their actions, inactions, and decisions.

The Honor Code applies to any academic matter pertaining to the Medical Laboratory Science Program. "Academic matter" means any activity which may affect a grade or in any way contribute toward the satisfaction of the requirements for graduation, without reference to the geographical locus of the activity. Academic matter also includes any misrepresentations made with respect to academic achievement by way of transcript, resume or curriculum vitae, or oral statement etc.

Academic matters include, but are not necessarily limited to, the following:

- Any examination; quiz; or other assessment
- Any research or other assignment for a course, writing program or seminar to be done inside or outside of class;

- Professional behaviors as outlined in the MLS Program Academic Policies
- Any work which contributes to the grade or assessment in a course
- Any written or oral misrepresentations or partial misrepresentations concerning classroom conduct or academic achievement

Examples of conduct that have been regarded as being in violation of the Honor Code include:

- Using outside assistance during an examination or assisting another student during an examination
- Unpermitted collaboration or use of technology during completion of homework or online assignments
- Plagiarism
- Revising and resubmitting an assignment, quiz or exam for re-grading, without the instructor's knowledge and consent
- Representing as one's own work the work of another
- Giving or receiving aid on an academic assignment unless expressly permitted by the instructor
- Being an Active Bystander – observing others but not reporting
- Disrespectful or inappropriate language or discussion with fellow students, academic or clinical faculty, patients or families.
- Falsifying or altering data experimental data.

Faculty may ask students to agree to the Honor Code Statement for graded MLS Assignments at the start of their course:

Honor Code Statement for Graded MLS Assignments (exams, quizzes, lab reports, etc.) This Graded Assignment is my own work. I have neither given nor received unauthorized assistance with this Assignment (example: discussed with other students in person or shared electronically). I have only used the resources as directed by the faculty to develop this/these Assignment(s). I have not and will not copy or print this Assignment (including no image capture). I have not and will not use apps or other digital/electronic/web aids while taking a quiz or exam or in the development of a written assignment.

An acknowledgment that the student understands and agrees with the Honor Code statement is added to each course and possibly to each quiz, exam or assignment. There are no points associated with the acknowledgement, but students are required to answer to continue in the course. Answering NO or Do Not Agree is grounds for removal from the course.

MLS Program Technical Standards – Essential Functions

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status or sexual orientation.

In adhering to this policy, the University abides by the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the Minnesota Human Rights Act and other applicable statutes and regulations relating to equality of opportunity. The MLS Program encourages all

qualified individuals to apply for admission to the Bachelor of Science in Medical Laboratory Science.

The MLS Program curriculum, leading to eligibility for certification and licensure as a MLS practitioner, requires students to engage in diverse, complex and specific experiences critical to the acquisition and practice of essential laboratory professional skills and functions. Unique combinations of cognitive, affective, psychomotor, physical, and social abilities are required to satisfactorily perform these functions. In addition to being essential to the successful completion of the requirements of the bachelors or master's degree, these functions are necessary to ensure the health and safety of patients, self, fellow students, faculty and other healthcare providers.

The Technical Standards are knowledge, skill, and attitude/behavioral requirements necessary for successful admission and continuance by students for the MLS program. They are also necessary to acquire or demonstrate competence in a discipline as complex as diagnostic laboratory medicine. The National Accrediting Agency for Clinical Laboratory Sciences (<http://www.naacls.org>) requires that the Technical Standards (also called Essential Functions), required for admission to and continuance in the MLS program, be made available to prospective students and to the public.

Technical Standards – Specific Required Abilities

The student must be able to meet the following Technical Standards to be admitted to and to continue enrollment in the MLS Program in addition to the academic conduct set forth by the University Student Code of Conduct:

- *Locomotion and Gross Motor Skills*—Students must
 - move freely from one location to another in physical settings of the student classrooms and laboratories, medical laboratories and healthcare facilities
 - operate equipment in the laboratory or healthcare facility and must be able to lift and move objects of at least 20 pounds
- *Fine Motor Skills*—Students must
 - demonstrate sufficient coordination to allow delicate and controlled manipulations of specimens, instruments, and tools
 - demonstrate the ability to safely grasp and release small objects (e.g., test tubes, microscope slides); perform fine movements such as the ability to twist and turn dials/knobs (e.g., for a microscope, balance, or spectrophotometer); and manipulate other laboratory materials (e.g., reagents and pipettes) in order to successfully complete tasks
- *Communication Skills*—Students must
 - communicate effectively and sensitively in written and spoken English
 - comprehend and respond to both formal and colloquial English, by person-to-person, telephone, and written communication
 - appropriately assess nonverbal as well as verbal communication with other students, faculty, staff, patients, family and other professionals
 - Communicate respectfully and in a productive manner even in stressful conditions

- *Visual Acuity and Sensory*—Students must
 - identify and distinguish objects macroscopically and microscopically
 - read charts, graphs, and instrument scales as well as discern fine details of texture and color
 - demonstrate sufficient depth perception and spatial awareness to perform laboratory tasks efficiently and safely
 - discern fine details of structure, texture and color
 - demonstrate sense of touch and temperature discrimination sufficient to accurately perform laboratory testing

- *Cognitive Application Skills* — Students must
 - apply knowledge, skills, and values learned from previous coursework and life experiences to new situations
 - measure, calculate, reason, analyze, integrate and synthesize information
 - apply theory to practice and test performance to ensure quality outcomes
 - demonstrate sufficient cognitive (mental) abilities and effective learning techniques to assimilate the detailed and complex information presented in the MLS curriculum
 - learn through a variety of modalities including, but not limited to, classroom instruction; small group, team and collaborative activities; individual study; preparation and presentation of reports; application of theory to clinical practice, and use of computer technology
 - demonstrate capacity to perform these problem-solving skills in a timely fashion
 - comprehend three-dimensional relationships and to understand the spatial relationships of structures

- *Safety*— Students must
 - work safely with mechanical, electrical, thermal, chemical, radiologic, and biological hazards
 - follow prescribed guidelines for working with hazards
 - recognize and respond to safety issues appropriately
 - recognize emergency situations and take appropriate actions

- *Stability*— Students must
 - possess the psychological health required for full use of abilities and respond to others in a collegial and respectful manner
 - recognize emergency situations and take appropriate actions
 - maintain mature, sensitive, respectful, and effective relationships with patients, students, faculty, staff and other professionals under all circumstances, including highly stressful situations
 - demonstrate emotional stability to function effectively under stress and to adapt to an environment that may change rapidly without warning and in unpredictable ways

- *Affective (valuing) Skills*— Students must
 - show respect for self and others and project an image of professionalism, including appearance, dress, and self-confidence

- demonstrate complete personal integrity and honesty
 - adhere to appropriate professional deportment
 - know that his or her values, attitudes, beliefs, emotions, and experiences affect personal perceptions and relationships with others
 - examine and correct personal behavior when it interferes with productive individual or team relationships
 - possess skills and experience necessary for effective and harmonious relationships in diverse academic and work environments
 - demonstrate the physical and emotional stamina and capacity to function in a professional manner in the hospital, classroom and laboratory settings, including settings that may involve heavy workloads, long hours and stressful situations
 - tolerate physically and mentally taxing workloads and long work hours, to function effectively under stress, and to display flexibility and adaptability to changing environments
 - contribute to collaborative, constructive learning environments
 - respond to and accept constructive feedback from others; and take personal responsibility for making appropriate positive changes
 - adapt to changing environments, display flexibility, and learn to function in the face of uncertainties inherent in the clinical laboratory and medical practice
- *Professional skills*— Students must
 - follow written and verbal directions
 - work independently and with others as directed and under time constraints
 - maintain composure and demonstrate resilience under stressful situations or during heavy workload
 - prioritize requests and work concurrently on at least two different tasks
 - maintain alertness and concentration during a normal work period
 - learn and abide by professional standards of practice
 - possess attributes that include compassion, empathy, altruism, integrity, honesty, responsibility and tolerance
 - engage in patient care delivery in all settings and deliver care to all patient populations including but not limited to children, adolescents, adults, individuals with disabilities, medically compromised patients and vulnerable children or adults
 - accept responsibility for learning, exercising good judgment, and promptly complete all responsibilities efficiently and accurately
 - take corrective action based on instructor or preceptor feedback and guidance

Students with documented disabilities who may require accommodations to meet these Technical Standards should contact the Disability Resource Center for assistance.

Reference citation: (originally accessed August 17, 2011 – updated May 2022).

1. Details Report for: 29-2011 Medical and Clinical Laboratory Technologists. O*Net Online (US Department of Labor, Employment and Training Administration), 2010.
<http://www.onetonline.org/link/details/29-2011.00>
2. National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) <http://www.naacls.org>

Accreditation, Certification, and Licensure

Program Accreditation

The University of Minnesota Medical Laboratory Science program is proud to be fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

NAACLS

5600 N. River Rd, Suite 720
Rosemont, IL 60018-5119
Phone: 847-939-3597 or 773-714-8880
Web Site: <http://www.naacls.org>
Email: INFO@naacls.org

NAACLS accreditation is a voluntary but essential process to ensure the quality of laboratory education programs throughout the United States. These Standards guide the development of the curriculum and include such topics as professional communication, evaluation, intervention, service delivery, research, and professional community as well as the scientific content required for current practice in laboratory medicine. The purpose of these Standards is to establish, maintain, and promote standards of quality for educational programs in the medical laboratory sciences and to provide recognition for educational programs which meet or exceed the minimum standards outlined in this document.

The Standards are to be used for the development and evaluation of medical laboratory science programs. Paper reviewers and site visit teams assist in the evaluation of the program's compliance with the Standards. Lists of accredited programs are published for the information of students, employers, and the public.

NAACLS accreditation assures that the MLS program at the University of Minnesota has met or exceeded specific national Standards developed through a process that requires the input and review of peer groups, sponsoring and participating organizations, affiliating organizations and other interested professional groups.

The MLS program delivers the curriculum at the Twin Cities campus of the University of Minnesota and offers certification to students entering through the following affiliated colleges: University of Minnesota – Duluth campus, University of Minnesota – Rochester campus, St. Cloud State University, Minnesota State University-Mankato, and the University of Wisconsin-River Falls. Students from affiliated colleges will receive their official degrees from their home campus or college plus a certificate of completion from the University of Minnesota – Twin Cities.

Professional Certification

Graduates from the MLS Program of the University of Minnesota are eligible to take the national certification examination as medical laboratory scientists. The examination is conducted by the American Society of Clinical Pathology's Board of Certification (ASCP BOC). Most institutions require certification for employment in the medical laboratory. The University

of Minnesota's Medical Laboratory Sciences Program encourages all MLS graduates to obtain their certification, regardless of their place of employment, in order to increase their future employment options. Application forms, examination content guidelines, practice tests and much more are available online through the ASCP web site and through the Program's Degree/Certificate Clearance Canvas Site. Obtaining the Bachelor of Science degree, Certificate in MLS, or Professional Masters in MLS is not contingent on passing any type of national certification examination.

American Society of Clinical Pathologists (ASCP)

Board of Certification (BOC)

33 W. Monroe St., Suite 1600

Chicago, IL 60603-5617

(312) 541-4999 or 1-800-257-2727

<http://www.ascp.org/Board-of-Certification>

Professional Licensure

Some states have laws or regulations governing the practice of Medical Laboratory Science. Licenses are issued to qualifying persons. In order to obtain a license, states require that the individual has passed a national certification exam. In some states the exam must be from a particular certifying agency and there may be additional conditions that must be met. Persons considering employment in a state that has licensure for medical laboratory professionals should contact the State Department of Health of that state for further information.

States that currently have licensure laws include: California, Florida, Georgia, Hawaii, Louisiana, Montana, Nevada, North Dakota, Rhode Island, New York, West Virginia, and Puerto Rico. More states are added to this list each year.

Helpful information for understanding the licensure process is available at:

<https://www.alliedhealth.umn.edu/medical-laboratory-sciences-mls/current-students/certification-and-licensure>

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MLS PROGRAM CURRICULUM



Competency-Based Education

The MLS Program uses competency-based education to help students achieve the required outcomes of the program and for their future employment. Although grades are still the key for college education, it is more important that students who finish our degree program are able to demonstrate the required competencies in content knowledge, application, problem solving, and performance skills.

Blended Learning

All courses within the MLS program are delivered at least in part online. Transitioning away from seat time, in favor of a structure that creates flexibility, allows students to progress as they demonstrate mastery of academic content, regardless of time, place, or pace of learning. These strategies include online and blended learning, project-based learning, and strategic group learning activities. Course materials, references, narrated lectures, interactive modules, web sites, and videos are presented to students within the Course Management System called *Canvas*. This type of learning leads to better student engagement because the content is available to each student but tailored to their unique needs. Instead of attending a single lecture and hoping you captured all of the notes, students are able to review lecture materials as many times as they wish or review them at their own pace. Students who need more time or want more review of content can take the time they need when they want to prepare for class.

The Flipped or Active Classroom

Most of our lecture courses follow the “Active Classroom” model. Students prepare for the in-person sessions by reviewing course materials and content in advance. When they arrive in class they typically work in groups to apply their background knowledge to problem solving case studies or situations. In this model, the faculty member acts as their guide and can provide instruction and corrective action as the students go through the work problems. Instead of sitting in a classroom while the instructor tells them how to do the work, the students are actually practicing the problems solving work with the faculty member’s help. Although this is often a significant adjustment for students who have not taken courses like this before, they quickly realize the value of the guided practice sessions.

Academic Calendar

There are many important dates related to attendance, registration, and billing, etc. It is essential that students are aware of the dates and deadlines associated with the Medical Laboratory Sciences Program. The University of Minnesota undergraduate academic calendars are available online via One Stop. <https://onestop.umn.edu/>

Prerequisite Course Work

BS Degree and Certificate

Prior to entering year 3 of the professional program, required courses include general biology, human physiology, two semesters of inorganic chemistry with laboratory, two semesters of organic chemistry, and two mathematics courses.

Year 3 students in the professional program enroll in microbiology with a laboratory, genetics, and biochemistry, as well as the following three MLSP courses: Principles of Immunobiology, Fundamentals of Biomedical Laboratory Techniques, and Professional Issues in the Healthcare Community. Students applying to enter the professional program at the beginning of year 4 must have completed these courses with grades of C or better.

Professional Master's (MMLS) Degree

Prior to entering the professional master's degree program, students must have obtained a baccalaureate degree and successfully complete all of the same prerequisite science courses, as well as all of the foundation science courses with a grade of C or higher. In response to UMN policy to ensure that graduating students will be up-to-date in the discipline, science courses older than seven years will be evaluated and may need to be repeated.

Completion of Outstanding Courses & Conditions

All admitted students **MUST** complete all courses and conditions **PRIOR** to enrolling in their first semester of the program. Failure to complete courses and conditions remaining will result in rescinding the offer of admission to the Program. There are no exceptions to this policy.

Please have your college/university mail **official transcripts** directly to (if not a current UMN student):

BS and Certificate	MMLS
University of Minnesota Office of Undergraduate Admissions 240 Williamson Hall 231 Pillsbury Drive SE Minneapolis, Minnesota 55455-0213	Admissions Coordinator Center for Allied Health Programs Mayo Mail Code 714 516 Delaware St SE Minneapolis, MN 55455

Transfer of Previous Courses

The University of Minnesota accepts transfer credit from regionally accredited colleges or universities in the United States and from internationally recognized institutions of higher education in other countries. Transfer credit will generally be given for coursework that is similar in level and content to courses that are offered at the U of M—Twin Cities campus. Standard liberal arts courses tend to transfer routinely (e.g., courses in the arts, humanities, mathematics, physical and biological sciences, and social sciences). Vocational, technical, or skills-based courses generally do not transfer. In addition, courses usually do not transfer for subjects that are not offered for credit on the Twin Cities campus.

Note: Even though classes or credits may be accepted in transfer by the UMN, the courses may not meet the requirements for the MLS program. Please see the MLS program Transfer Guides or consult Student Services.

For more information on transfer course petitions, review the Transfer Course Petition Guide at http://admissions.tc.umn.edu/PDFs/TC_guide.pdf, and the [University of Minnesota Transfer Credit Policy](#). For program specific course transfer information please go to the MLS program web site at: <https://www.alliedhealth.umn.edu/medical-laboratory-sciences-mls/prospective-students/planning-guides>

Liberal Education & Writing Intensive Requirements (BS Degree only)

All students must complete liberal education requirements to obtain a degree from the University of Minnesota. Due to the intensive nature of the Year 4 MLS curriculum, students should have all liberal education requirements complete at the end of Year 3, with the exception of their last 4xxx-level writing intensive course in the major. Information detailing the UMN Liberal Education requirements, including specific themes and cores, is available via One Stop at <https://onestop.umn.edu/academics/undergraduate/lib-ed-requirements-overview/liberal-education-requirements>.

All students graduating from the University of Minnesota's MLS program must fulfill all the requirements of the MLS program as well as the requirements for a bachelor's degree from the University of Minnesota. Students who are enrolled at another UMN campus or at a partnering university (such as St. Cloud, Mankato, or UW River Falls) must complete all MLS professional courses including all clinical experience courses (to be permitted to take the ASCP national certification examination) AND fulfill all the depth and breadth requirements of their *home* university.

Each student has an [Academic Progress Report](#) (APAS) (GPAS for MMLS students) that specifically documents his/her progress towards degree completion. [The APAS/GPAS report is available on One Stop](#) and should be used as an advising and degree planning tool. MLS students should refer to the APAS report when working with his/her academic or faculty advisor to be sure their degree plans are correct.

More about Transfer Credit, Test Awards, and Liberal Education (General Education) Requirements can be found on the [UMN Admissions webpage for Transfer Students](#), including information about:

- Meeting U of M Liberal Education Requirements
- Minnesota Transfer Curriculum

Honors Curriculum

Honors students can fulfill Honors requirements in a variety of ways. The MLS program has one Honors course available (MLSP5013H) to fulfill Honors requirements, as well as a thesis support course (MLSP6905) to guide them through their Honors thesis work. Honors students can also enroll in Masters (MLSP6XXX) courses, if space is available, to fulfill Honors requirements. Masters level courses are available in hematology, microbiology, chemistry, transfusion medicine, molecular diagnostics, and laboratory management. Honors students will typically work on their Honors research during the summer after the senior year didactic courses and enter their clinical experiences in the fall. Honors students are expected, at a minimum, to

present their thesis the following December during the departmental poster session with the graduate students. Students pursuing summa cum laude honors must generate a thesis comprised of original work and must include analysis of data directly generated by the student. More information can be found at honors.umn.edu.

Writing Enriched Curriculum (WEC) Outcome Goals

In 2013 the Medical Laboratory Science Program began an ongoing program to implement and sustain improvement in undergraduate writing. This initiative acknowledges that writing abilities are an essential communication skill for entry into the workforce as well as graduate or other professional schools. For that reason each course will assess the students' ability to convey information through writing to a variety of audiences as an indicator that the student has mastered the required course content.

Writing abilities of MLS graduates:

- Understand and use standard English, structure, and organization
- Use language effectively in a concise and comprehensible manner
- Communicate in different mediums appropriate to the content, delivery mechanisms, and audience
- Record and document information accurately and in the appropriate format
- Access, select, critically evaluate and convey information
- Engage in self-evaluation of writing skills
- Write with honesty, integrity, originality, and contextual sensitivity

Undergraduate Study Plans (BS and Certificate)

Year 3: Newly admitted Year 3 students must complete all of the remaining science, foundation, and liberal education courses, including one of the two required MLS upper division writing courses by the end of spring semester to progress to Year 4 of the program. The other required MLS upper division writing course will be taken during the final clinical semester. Year 3 students are required to develop their individual plan for completing the requirements. Students must meet with the academic advisor to confirm that their schedule is acceptable. Once approved, students must adhere to the schedule or seek approval for any changes. Making changes without approval may result in program probation.

Year 3 – Sample Schedule – Newly Admitted Year 3 must complete all requirements during the Fall or Spring Semesters

Fall	Course Title	Cr	Spring	Course Title	Cr
GCD 3022	Genetics	3	MLSP 5311	Biomed Lab Methods	4
BIOC 3021	Biochemistry	3	MICB 3301	Biology of Microorganisms	5
Lib. Ed	Elective	4	MLSP 5011W	Professional Issues	2
MLSP 5511	Immunobiology	3	Lib. Ed Course	Elective	3
		13			14

Year 4: During the professional year of the MLS program (Year 4) the enrollment plan is fixed. Students must enroll in all required courses in the required semester and in the required sequence to progress in the program.

Year 4 – Summer – ONLY for Newly Admitted Year 4 Students

<i>Summer</i>	<i>Course Title</i>	<i>Cr</i>
MLSP 5011W	Professional Issues	2
MLSP 5311	Biomed Lab Methods	4
MLSP 5511	Immunobiology	3
		9

Year 4 Schedule

<i>Fall</i>	<i>Course Title</i>	<i>Cr</i>	<i>Spring</i>	<i>Course Title</i>	<i>Cr</i>
MLSP 5111	Micro I	3	MLSP 5113	Micro II	3
MLSP 5112	Micro I Lab	2	MLSP 5213	Heme II	3
MLSP 5211	Heme I	3	MLSP 5214	Heme II Lab	1
MLSP 5212	Heme I Lab	1	MLSP 5312	Body Fluids	2
MLSP 5313	Clinical Chem	3	MLSP 5513	Transfusion Med	3
MLSP 5012	Educ Meth/IP Educ	1	MLSP 5514	Trans Med Lab	2
MLSP 5013	Scholarly Inquiry	1			
		14			14

Year 5: Clinical Experience Semester

During the final semester of the program, students participate in a simulated laboratory experience and a set of clinical experiences in the four major disciplines within Medical Laboratory Sciences. This is also the semester they enroll in the Laboratory Management and Professional Issues (writing intensive) course. In these clinical courses, students perform laboratory testing in regional hospital and clinic laboratories under the supervision of laboratory personnel. MLS students also learn about the management of the laboratory and interactions with other health care practitioners. Students are assigned to clinical experience locations during either summer or fall semester by random assortment based on a number of factors including academic standing, housing availability, and number of experiences available at each clinical affiliate laboratory. Students are usually assigned to at least one rural location to learn the differences in practice in smaller facilities.

Courses during Clinical Experience Semester

<i>Summer or Fall</i>	<i>Course Title</i>	<i>Cr</i>
MLSP 5014W	Laboratory Operations & Management	2
MLSP 5701	Applied Microbiology	2
MLSP 5702	Applied Hematology/Hemostasis	2
MLSP 5703	Applied Clinical Chemistry/Urinalysis	2
MLSP 5704	Applied Transfusion Medicine	2
	Total	10

Graduate Study Plans (MMLS Degree)

Full-Time

SUMMER	COURSE	CR	9
MLSP 5011W	Professional Issues in Healthcare Lecture	2	Online
MLSP 5311	Biomedical Laboratory Methods Combination	4	Lec/Lab
MLSP 5511*	Principles of Immunobiology	3	Hybrid
FALL	COURSE	CR	14
MLSP 5012	Educ Methods/IP Education Lecture	1	Hybrid
MLSP 5013	Research & Scholarly Inquiry Lecture	1	Online
MLSP 6111	Microbiology I Lecture	3	Hybrid
MLSP 5112	Microbiology I Laboratory	2	Laboratory
MLSP 6211	Hematology I Lecture	3	Hybrid
MLSP 5212	Hematology I Laboratory	1	Laboratory
MLSP 6313	Chemistry in Health & Disease Lecture	3	Hybrid
SPRING	COURSE	CR	14
MLSP 6113	Microbiology II Lecture	3	Hybrid
MLSP 6213	Hematology II Lecture	3	Hybrid
MLSP 5214	Hematology II Laboratory	1	Laboratory
MLSP 5312	Body Fluid Analysis Combination	2	Lec/Lab
MLSP 6513	Transfusion Medicine Lecture	3	Hybrid
MLSP 5514	Transfusion Medicine Laboratory	2	Laboratory
SUMMER/FALL	COURSE	CR	12
MLSP 5014W	Laboratory Operations & Management	2	Online
MLSP 5701	Microbiology Practicum	2	Clinical
MLSP 5702	Hematology/Hemostasis Practicum	2	Clinical
MLSP 5703	Chemistry/Urinalysis Practicum	2	Clinical
MLSP 5704	Transfusion Medicine Practicum	2	Clinical
MLSP 6801	Advanced Practicum	2	Clinical
FALL/SPRING	COURSE	CR	9
MLSP 6905	Research/Capstone Project	3	Arranged
MLSP 6024	Advanced Laboratory Operations	3	Online
MLSP 6401	Fund Molecular Diagnostics	3	Online
	TOTAL CREDITS		58

*Can be omitted if students have taken an immunology course during their baccalaureate degree.

Part-Time

SUMMER	COURSE	CR	9
MLSP 5011W	Professional Issues in Healthcare Lecture	2	Online
MLSP 5311	Biomedical Laboratory Methods Combination	4	Lec/Lab
MLSP 5511*	Principles of Immunobiology	3	Hybrid
FALL	COURSE	CR	8
MLSP 5012	Educ Methods/IP Education Lecture	1	Hybrid
MLSP 6211	Hematology I Lecture	3	Hybrid
MLSP 5212	Hematology I Laboratory	1	Laboratory
MLSP 6313	Chemistry in Health & Disease Lecture	3	Hybrid
SPRING	COURSE	CR	6
MLSP 6213	Hematology II Lecture	3	Hybrid
MLSP 5214	Hematology II Laboratory	1	Laboratory
MLSP 5312	Body Fluid Analysis Combination	2	Lec/Lab
FALL	COURSE	CR	6
MLSP 6111	Microbiology I Lecture	3	Hybrid
MLSP 5112	Microbiology I Laboratory	2	Laboratory
MLSP 5013	Research & Scholarly Inquiry Lecture	1	Online
SPRING	COURSE	CR	8
MLSP 6113	Microbiology II Lecture	3	Hybrid
MLSP 6513	Transfusion Medicine Lecture	3	Hybrid
MLSP 5514	Transfusion Medicine Laboratory	2	Laboratory
SUMMER	COURSE	CR	6
MLSP 5014W	Laboratory Operations & Management	2	Online
MLSP 5701	Microbiology Practicum	2	Clinical
MLSP 5702	Hematology/Hemostasis Practicum	2	Clinical
FALL	COURSE	CR	6
MLSP 5703	Chemistry/Urinalysis Practicum	2	Clinical
MLSP 5704	Transfusion Medicine Practicum	2	Clinical
MLSP 6801	Advanced Practicum	2	Clinical
SPRING	COURSE	CR	9
MLSP 6905	Research/Capstone Project	3	Arranged
MLSP 6024	Adv Laboratory Oper & Management	3	Online
MLSP 6401	Fund Molecular Diagnostics	3	Online
	TOTAL CREDITS		58

*Can be omitted if students have taken an immunology course during their baccalaureate degree.

Clinical Experience – All Academic Plans

Clinical Rotation Assignments

After all on campus courses are completed, students will participate in a simulated laboratory experience, after which they will be able to go to their assigned clinical experiences. Students are assigned to clinical experiences based on availability, academic standing in the MLS Program, and a randomization process. *Students must have successfully completed all didactic and campus laboratory courses before enrolling in any clinical experience course.* Students are asked to complete a survey asking personal information that may assist in scheduling their clinical placements. It is important that students provide accurate and reliable information in this survey process, because **once assigned clinical placements cannot be modified.**

Please note: Students cannot be assigned to clinical locations where they are currently employed or where immediate family members are currently employed. Failure to disclose these conflicts of interest on the clinical practicum information survey will invalidate the clinical practicum rotation and place the student on program probation. This will require rescheduling a clinical practicum and a delay in graduation.

Every opportunity will be taken to provide students with timely clinical assignments so they may graduate on time. However, some students may have a delayed clinical schedule if sufficient clinical sites are not available to accommodate every student. Students need to be aware that clinical rotations can be assigned ANYWHERE in the Midwest including the states of Minnesota, Wisconsin, North Dakota, and Iowa and travel to a distant rotation site is a distinct possibility. Travel and housing expenses are the responsibility of the student. MLS works closely with students to secure supplemental funding when available to help support requiring temporary housing. Students are strongly encouraged to seek One Stop counseling for financial aid options.

Limited clinical rotation availability: The MLS Program guarantees that students will be placed in all required clinical rotations as long as the student is in good academic standing. However, when there are limited clinical rotations available because of clinical site constraints, there may be a delay in their schedule. Because our clinical placements are inherently designed for flexibility, delays or changes in placement are rare.

Clinical Grade and Evaluation

Rating forms and criteria of performance have been developed for each clinical experience area and will be explained to the students upon entry into the area. The rating forms are used to evaluate student performance and knowledge during their clinical experience as well as the behavioral and professional skills necessary for successful practice. They may also be used for individual counseling and employment recommendations. Students must also successfully complete a final exam for each rotation to demonstrate competency for the MLS discipline. Satisfactory performance for each clinical experience will be indicated by a grade of S; unsatisfactory performance will be given a grade of N (no credit). A grade of S is required in all clinical experience courses for graduation. A grade of N must be made up by repeating the course. Clinical Experience course syllabi will have additional information.

Clinical Schedules

During the clinical experience semester, students will be required to attend on a full-time basis. The typical schedule for a clinical experience is 7:00am to 4:00pm or 8:00am to 5:00pm. On a rare occasion students may be scheduled for a “swing shift” experience (3:30pm – 11:00pm). Students will be fully informed of these schedules well enough in advance to make personal arrangements.

Clinical Rotation Placement and Disclaimer

Although we make every effort to confirm clinical rotations for each and every student for placement no later than Fall semester, students should be aware that due to increased student numbers and limitations set by the clinical practicum sites, your clinical rotations may be modified or delayed, possibly extending into Spring Semester. We will make every effort to schedule your clinical rotations at the earliest time possible. Clinical rotations are assigned randomly. Clinical sites may be scheduled out of the Twin Cities area; students should be aware that these rotations will require travel, and may require housing accommodations. It is important that students plan accordingly.

Other Clinical Experience Policies

Employment Hours during the Clinical Experience

Because of the intense nature of the clinical experience courses and the requirements for student attendance and study, the MLS program strongly recommends that students do not work during this semester. With the current economic climate along with personal and family obligations, we understand that some students must work. However, the MLS Program will not make accommodations in the clinical schedule for outside work. No changes will be made in clinical hours to accommodate a student’s outside work or personal obligations.

Additional Course Enrollment

It is a policy of the MLS program that students are not allowed to enroll in any non-MLSP courses during their clinical experience semester. No exceptions will be granted to this policy.

Health Care and Health Insurance Requirements

If a student is enrolled in a clinical course and receives an incomplete, and the course is completed in a later semester, students are still responsible for their own personal health care insurance coverage. Check to be sure you are covered during this time. This pertains to those students not registered that term.

University of Minnesota Learning and Development Outcomes

The University of Minnesota has a long history of commitment to assessing student learning. With the adoption of the current University of Minnesota’s undergraduate learning and development outcomes, the University has undertaken a renewed effort to establish more consistent assessment frame-work across all departments, provided stronger central leadership, simplified expectations, and worked to connect the multiple streams of assessment data to better inform academic planning. The University’s mission is to support all academic and support units in their assessment of the student learning process to continuously enhance the student experience and to prepare them for the next stages of their lives. Each portion of the learning and development outcomes should be attainable by the end of the baccalaureate degree, certificate or professional master’s degree program.

UMN Learning Outcomes for Baccalaureate Degree Candidates

At the completion of a Baccalaureate degree from UMN, the student should be able to:

1. Identify, define, and solve problems
2. Locate and critically evaluate information
3. Use a body of knowledge and mode of inquiry with mastery
4. Understand diverse philosophies and cultures within and across societies
5. Communicate effectively
6. Understand the role of creativity, innovation, discovery, and expression across disciplines
7. Use the skills acquired at the University for effective citizenship and life-long learning

UMN Development Outcomes for Baccalaureate Degree Candidates

The successful University of Minnesota student engages in activities which develop and demonstrate achievement in several areas.

Responsibility and Accountability

- Makes appropriate decisions regarding his/her own behavior
- Recognizes and accepts consequences of actions
- Meets agreed upon expectations
- Follows through on commitments
- Willing to accept responsibility for personal errors
- Takes responsibility for his/her own learning

Independence and Interdependence

- Appropriately determines when to act alone and when to work or consult with others
- Demonstrates ability to initiate action and effectively engage others to enhance outcomes
- Works with minimum supervision whether it be alone or within a group
- Adapts behavior as appropriate in response to team or organization needs

Goal Orientation

- Manages energy and behavior to accomplish specific outcomes
- Possesses and maintains sufficient motivation to achieve goals
- Has an understanding about how to use his/her talents and skills to contribute to the betterment of society
- Demonstrates effective planning and purposeful behavior
- Does not allow distractions to prevent timely completion of tasks
- Pushes self, when needed, to accomplish goals

Self-Awareness

- Maintains and projects optimistic perspective
- Expects the best from self and others
- Accurately assesses and articulates (when appropriate) personal strengths and weaknesses
- Shows interest in learning about others and their accomplishments
- Demonstrates ability to help others adapt to new situations

Resilience

- Able to recover from disappointment or bad experience and continue to work successfully
- Able to learn from a bad experience and recover
- Able to work through disappointments (i.e., what caused them, what can be done to avoid them next time, and what can be done to repair them now)

Appreciation of Differences

- Works effectively with others, despite differences; can respectfully discuss differences with others
- Recognizes advantages of moving outside existing “comfort zone”
- Seeks out others with different backgrounds and/or perspectives to improve decision making
- Appreciates the importance of diversity and conveys this value to others
- Understands and respects the values and beliefs of others

Tolerance of Ambiguity

- Demonstrates intellectual and emotional ability to perform in complicated environments and the absence of standard operating procedures
- Can work under conditions of uncertainty

Medical Laboratory Sciences Program Goals and Outcomes

MLS Program Goals

Along with the University of Minnesota’s student learning and development goals, the MLS program has specific goals of the program and outcomes for students that align with our specialized mission.

To fulfill the mission of the Medical Laboratory Sciences Program and University as well as meet the needs of the medical laboratory community, the Medical Laboratory Sciences Program will:

- Use innovative educational methods to deliver an exceptional curriculum which best suits the needs of a diverse population
- Facilitate transfer of knowledge and skills to adapt to a current and evolving scope of practice
- Foster an environment which develops critical thinking, clinical reasoning, and creative problem solving
- Develop and investigate innovative educational methods to contribute to best practices in laboratory science education
- Collaborate with internal and external partners to achieve the research needs of the profession
- Disseminate relevant materials to professional colleagues and community stakeholders through research and scholarly inquiry
- Promote the profession through innovative education and engagement
- Collaborate with other healthcare professionals to serve the needs of a diverse population
- Cultivate the environment of active participation in professional organizations

- Model professional, ethical practice, and leadership

Student Outcome Goals for the Undergraduate Program

After completion of the MLS professional curriculum (BS and Certificate), the student should:

1. Master the Medical Laboratory Science Entry Level Curriculum and mode of inquiry appropriate for graduates entering the profession, including interpretation, performance, and application of laboratory testing.
2. Identify and critically evaluate information and develop a plan toward problem resolution.
3. Actively participate in partnerships that enrich patient and community health.
4. Communicate laboratory information effectively to a variety of audiences.
5. Continue personal and professional development.
6. Understand, value, and practice ethical principles, moral reasoning, and professional responsibilities.
7. Value and practice skills for continuous improvement through critical self-appraisal and openness to feedback.
8. Make decisions in the absence of complete information while functioning independently and professionally in a complex environment.
9. Apply the skills acquired in the MLS program for effective leadership and advocacy within and for the profession.
10. Positively contribute to a productive and professional environment.

Student Outcome Goals for the Professional Master's Degree (MMLS)

After completion of the MMLS professional curriculum, the student should:

1. Master the MLS curriculum content and mode of inquiry, including interpretation, performance and application of laboratory testing
2. Demonstrate proficiency in a focused area of inquiry beyond entry level laboratory practice
3. Identify and critically evaluate information and develop a plan toward problem resolution
4. Develop, evaluate and implement laboratory utilization strategies in collaboration with diagnostic teams to optimize patient and population health outcomes
5. Communicate laboratory information effectively to a variety of audiences (e.g. patients, health care providers, families, and community stakeholders) improving delivery systems and optimizing health outcomes
6. Develop and disseminate research and scholarship findings to professional colleagues and community stakeholders through ethical and responsible discovery
7. Advocate for the profession through engagement with stakeholders and active participation in professional societies; shaping public policy and regulations impacting the field of laboratory medicine
8. Develop, participate in, and promote the value of continuing personal and professional development

Professionalism, Affective Domain, and Professional Behaviors

The MLS program has primary responsibility for ensuring an environment that nurtures the professional development of future laboratory practitioners and for effectively assessing the professionalism competency of the learners. In addition to the scientific and technical knowledge, skills and abilities you will learn in the MLS program, students must attain

competency in professionalism. While you are in the program you will need to make the transition from a student to a professional to ensure patient and individual safety. Every effort is made to foster students' professional growth and development throughout their enrollment. The program maintains a process for identifying and addressing unprofessional behavior. Each MLS course will have a portion of the grade based on your development of these professional behaviors also called Affective Domain Behaviors.

Professional Behaviors

The MLS Program requires that students behave with professionalism and conduct themselves as would be expected of a medical laboratory scientist in the workplace (e.g. being on time, using respectful language in communications, and adhering to work place rules). Professional behaviors fall under the scope of academic performance standards. Any behavior that violates the University of Minnesota Student Conduct Code is handled under the scope of Student Conduct policies and procedures.

Students are expected to demonstrate professional behaviors including:

- a. Appropriate and responsible collaboration with supervisors, instructors, staff and peers
- b. Acceptance of personal responsibility for attaining professional competence
- c. Demonstrate resilience
- d. Engaged response to constructive feedback
- e. Consistent work behavior (e.g., initiative, preparedness, dependability)
- f. Effective time management
- g. Respect for diversity and others' opinions
- h. Effective, positive, and respectful interpersonal skills (e.g., cooperation, flexibility, tact, and empathy) in communication and collaboration with colleagues, supervisors, instructors, clients, clients' family, and others contacted while in a student role
- i. Adherence to safety regulations and to good safety judgment in class, clinical experience, and all other activities associated with the curriculum.
- j. Provision of only true and accurate information as a rationale for requesting special consideration on a test, assignment, or other aspect of the curriculum.
- k. Demonstrate quality work with precision and accuracy; reports only true and accurate results; documents accurately; corrects errors appropriately
- l. Maintain compliance with all MLS Program Technical Standards
- m. Comply with all requirements for Academic Integrity

Professional behavior is expected throughout the curriculum. This includes but is not limited to classroom sessions, online interactions, clinical experiences, public/professional engagement experiences and program supported activities. Professional behavior is assessed through a variety of mechanisms and is evaluated with courses and across the curriculum. These include, but are not exclusive to, formal faculty and adviser evaluations, clinical experience evaluations, group-process forms from collaborating group members, and faculty and peer observations.

Affective Domain Syllabus Statement

The following is the statement included in MLS courses where affective assessments will be a part of the course grade:

The MLS Program requires that students behave with professionalism and conduct themselves as would be expected of a medical laboratory scientist in the workplace.

Professional behaviors fall under the scope of academic performance standards. Professional behavior is expected throughout the curriculum. This includes but is not limited to classroom sessions, online interactions, clinical experiences, public/professional engagement experiences and program supported activities. Professional behavior is assessed through a variety of mechanisms and is evaluated within courses and across the curriculum. In this course, student affective behavior will be assessed throughout the semester as a competency. Student evaluation and feedback will be provided at least twice during the semester (including a final evaluation). Failure to meet minimum thresholds will result in Course failure.

The Culture of Educational Programs in the Health Professions

When students enter the MLS program at the University of Minnesota they come to us from a number of different education and experience backgrounds. Some students have been at the University of Minnesota since they were freshman, while others transferred in as undergraduates from community colleges or from 4-year colleges. Some students may already have a bachelors, masters, or even a doctoral degree but need to complete our program to obtain the professional MLS credential to find employment in a medical laboratory.

Regardless of where they started or are coming from, the vast majority of students are not fully prepared for the high intensity and the extreme accountability that is required to successfully complete our program. To help you understand and begin to prepare, we need to take you back to your first few days in a college class. You were used to the relative ease of high school and when you arrived at college – even for the best students – it could turn out to be quite challenging. You were on your own to make it work. Perhaps this was the first time you actually had to study or work hard to understand the content or for a good grade. But you made it because you adapted. For some of you there was a similar shift when you went from lower division to upper division courses. But now we are asking you to take another big step up into the world of professional medical education.

What does this mean? In previous courses you may have been given extra credit or an extension of time for an assignment. You might have been able to skip a class session and still keep up with the information or request to redo an assignment if you received a low grade. Your class might have graded on a curve to help students pass the course or you might convince an instructor to “round up” your points so that you received a B+ instead of a B. But these little extras are no longer going to be available now that you are enrolled in a professional medical program.

Medicine and the treatment of patients is not something that allows extra credit, more time, or rounding up. You must be able to do the testing, interpret the results, and possibly recommend additional testing or treatment without error – all the time and every time. This is competency-based education that is performance based as well. You need to be able to perform under stress, with a time limit, and meet or exceed the quality and accuracy expectations. People’s lives are at stake; perhaps one of your own family members.

This mind set can be a significant readjustment for students who are used to negotiating for one extra point here or one point there. You must learn and be able to apply the information in each course. So we need you to understand that this is a very different culture than the one you’ve come from.

The MLS Program at the University of Minnesota has an ethical responsibility for the safety of patients with whom students and graduates will come in contact. Although students learn and work under the supervision of the faculty, students interact with patients and their specimens throughout their MLS education. Patient safety and well-being are therefore major factors in establishing requirements involving the physical, cognitive, and emotional abilities of a student for admission, progression, and graduation.

Students must have the physical and emotional stamina and capacity to function in a competent manner in the hospital, classroom and laboratory settings, including settings that may involve heavy workloads, long hours and stressful situations.

There are also different responsibilities for students and faculty in a professional curriculum. Faculty will provide you with content, learning opportunities, and guided practice. But students are also expected to develop a sense of personal responsibility for their learning. So instead of a single class here and another class there you will find that you must also learn how to be a student in a professional curriculum; how to seek out and find information for yourself. You will also find probably for the first time in your academic career that prerequisite courses are truly prerequisites. We will expect you to be able to remember and apply concepts in your previous courses to your MLS courses, as well as from one MLSP course to the next. We may not spend time re-teaching those concepts, but we will refer you to support and resources to help you remediate.

One of the goals of the program is to develop your abilities as a life-long learner, someone who can teach themselves throughout the development of their career. Because the science and technology of medicine is constantly changing we need to prepare you for your future. Many students are not used to this culture and are upset that faculty will not answer their questions directly. But you should expect faculty to refer you to the resources and then if you still have questions come back for discussion. The faculty in the MLS Program will strive to teach you all of the content as well as the competencies of the profession. They have a vested interest in your success in the program and in your future professional life.

Commitment to Inclusion and Equity

The Medical Laboratory Sciences Program faculty and staff are unequivocally committed to racial justice and equal opportunity. We will continue to work toward removing barriers and systems that impede or limit the access that students of color have so that they may achieve their full potential. We strive to create an effective and encouraging learning environment, where every student experiences a sense of belonging and fulfillment. And we pledge to work today and every day in support of the role that education plays in advancing a more just and equitable society.

ACADEMIC ADVISING



Academic Advising Roles & Responsibilities

MLS Students have access to several different types of advisors all of whom are available for consultation: academic advisor, course director or faculty advisor (MMLS Students), and career advisor.

Major functions: Provides consultation, support, mentoring, and recommendations to MLS students while they are in the MLS program.

Scope of role: Advisement is provided related to students' academic performance. Issues that cannot be resolved within the scope of the advisor/student relationship can be referred to resources within the MLS program or other resources on campus.

Academic Advisor's key responsibilities:

- Contact student advisees during the first semester of the program to introduce themselves, discuss the advisor/advisee relationship, share resources, and encourage communication.
- Inform advisees of the advisor's schedule and method to be used for making appointments.
- Provide a safe supportive environment for students to discuss academic concerns in a confidential environment.
- Act as a resource for campus information and resources inside and outside of the MLS program.
- Monitor academic standing of advisees and initiate meetings with students as needed.
- Meet with the advisee when issues related to academic performance are not resolved at the instructor level.
- Keep records of student advising meetings, including a plan for resolution and corresponding timeline of action steps if appropriate.
- Act as an intermediary if needed between the student and the program faculty.

Faculty Course Director's or Career Advisor's key responsibilities:

- Contact student advisees during the first semester of the program to introduce themselves, as well as discuss future career directions.
- Discuss professional behaviors expected of the MLS student in campus courses, clinical experience courses, and entry into the profession.
- Act as a resource when students are having difficulties
- Mentor the student toward a successful career in laboratory medicine or beyond.
- Discuss content with student and provide study guidance
- Review course content with students while encouraging students' independent learning
- Guide and mentor student capstone projects (MMLS)

Student advisee key responsibilities:

- Seek timely advising for academic and professional behavior concerns whenever there is a perceived need or when notified by faculty.
- If you are experiencing issues in your program, follow outlined procedures in the advising quick reference guide in order to remediate those issues. You can find the advising quick reference guide later in this section.
- Communicate with the course director as soon as possible if you are having trouble.
- Communicate with your academic advisor as soon as possible, if having difficulty completing a remediation plan or if there are barriers to resolving an academic or professional behavior issue.
- Access recommended resources at the University as needed, including your advisors, student counseling services, disability services, or student conflict resolution services.

Resources & Forms

Student resources, including all forms referenced in this handbook, are available on our website. <https://www.alliedhealth.umn.edu/mls/current-students>

Advising & Registration Procedures

Although you are responsible for your progress in school and staying up to date on your degree progress, an advising team is available to help you with questions or issues that arise regarding being a student at the University of Minnesota. The academic advisor is a professional staff member, working with MLS students, who can assist you with many day to day advising issues and procedures such as submitting a petition, course registration, graduation planning, or re-adjusting to college life.

All students in the undergraduate MLS Program are expected to meet with their academic advisor to plan their class schedule each semester. Graduate students should meet with their faculty advisor. All students are encouraged to meet with their faculty advisor and academic advisor at least once a semester. Although, you may not think you have specific topics of concern, engaging with your advising team can provide you with exploration of campus resources, opportunities, and strategies for your professional development.

Advising Appointments

Students can set up appointments with their academic advisor by emailing

cahpadv@umn.edu or by calling (877) 334-2659. Questions about academic records or University policies as well as forms and other University services should be directed to the academic advisor. Please be sure to include your available times and days in the message you send. Appointments are scheduled during regular business hours.

Registration Procedures

Students have a variety of options for enrolling or registering for courses. Registration instructions and information are available via One Stop in the “Academics” section.

Registration Holds

Students may have holds on their registration for various reasons. You will need to meet with your academic advisor so they can release the hold if appropriate.

Table 1 Advising Quick Reference Guide

Process & Procedures	First Contact	Second Contact
Student Petitions	Academic Advisor	
Leave of absence	Academic Advisor	Program Director
Progression Issues: mid-term alerts, academic probation, academic suspension	Academic Advisor	Faculty Advisor
Registration holds	Academic Advisor	
Graduation & Commencement	Academic Advisor	
Concerns/grievances related to MLS or University policies	Academic Advisor	
Questions about University resources	Academic Advisor	
University Forms – (Forms Online via One Stop) Leave of absence, name change request, official transcript request	Academic Advisor	
Steps for Success Discussions	Academic Advisor	Faculty Advisor
Semester Enrollment Planning	Academic Advisor	NA
Financial Aid Issues	Academic Advisor	NA
Non-Academic Issues		
Career or graduate school planning	MLS Faculty	NA
Issues with didactic courses	Course Director	Academic Advisor
Issues with clinical courses	Director of Clinical Education	Academic Advisor
Questions about the profession	MLS Faculty	Academic Advisor
Academic difficulties	Course Director	Academic Advisor
Capstone or Research Project	Course Director Project Advisor	NA

First Semester Registration

A student's first registration in the MLS program always requires a transfer of college, either internally or from outside the University of Minnesota. You will be sent instructions on how to register for the correct classes by the academic advisor. The following suggestions can help students avoid any problems related to registration during the first semester:

- Confirm enrollment by following the instructions on the "[Verify enrollment](#)" page through Stop Student Services. It is best to print a copy of your enrollment to keep in your files for future reference.
- Confirm correct medical and immunization information through Boynton Health Services by calling (612) 625-8400* or through your Boynton portal.
- Confirm that registration is in the Medical Laboratory Sciences Program.
- Confirm correct tuition charges by viewing "My Finances" on the [myU Portal](#). Refer

any initial questions to One Stop by calling (612) 624-1111 or sending an email to onestop@umn.edu.

**Students seeking degrees from Mankato, St. Cloud, or UW River Falls must provide proof of medical coverage and immunization compliance from their home school or private insurance.*

Shared Responsibilities for Success

Faculty and students need a common understanding of their responsibilities for the learning process. This is especially important in a professional medical laboratory science curriculum. In order to successfully learn in a highly rigorous degree program such as MLS, students must take ownership and responsibility for their own education. Instructors can encourage students to take greater responsibility in their instruction by facilitating their access to resources, expectations, lines of communication, and opportunities for contribution and collaboration. MLS faculty may redirect a student's study area rather than answer their questions directly. This serves an intentional instructional strategy to guide the student to develop their own discovery abilities for life-long learning.

Along with the shared responsibilities for success in an academic environment, faculty and students also share a responsibility for providing a culture of well-being, learning, and productivity. Behaviors that are disruptive can interfere with the learning process of students and ability of faculty to provide classroom instruction. Each one of us has a responsibility to engage in a positive learning environment for all. Behaviors that interfere with the learning culture are not acceptable and must be remediated as soon as possible. If you have concerns about the classroom environment, please contact your faculty advisor or academic advisor for support and guidance. Please refer to the following web sites for additional information and guidance for maintaining a civil environment.

Instructors' Responsibilities

Instructors have a responsibility to establish and maintain a civil, productive, inclusive, and stimulating learning environment. Both instructors and students have a fundamental obligation to respect the instructional setting as a place for civil, courteous discourse. Instructors have a responsibility to accommodate students with documented disabilities. In order for a faculty member to provide a disability accommodation, formal documentation from the UMN Disability Resource Center is required, and must be given to each of the student's current course directors each semester.

Instructors have a responsibility to hold students accountable for their own work. This is meant to prepare you for a career as a medical professional, which requires a high level of ethical behavior and independent work. Our rules are rigid intentionally, because the work that you will perform upon graduation will influence the treatment of patients, and have life and death consequences. The instructors' responsibility is to teach, facilitate, and guide students toward these MLS program and professional goals.

Instructors have a responsibility to accommodate legitimate student absences and student exam conflicts in accordance with the policies (1) Intercollegiate Athletic Events During Study Day and Finals Week, (2) Makeup Work for Legitimate Absences, and (3) Scheduling

Examinations, Final Examinations, and Study Days.

For more information on the University's policy on "Instructor Responsibilities," please see:

<https://policy.umn.edu/education/instructorresp>

Students' Responsibilities

Students are responsible for their own successes and failures. Along with the Student Responsibilities, listed by the University (see below), we expect you to:

- Meet expectations
- Be honest in every situation, also maintaining academic integrity
- Act with civility
- Seek help when you need it - EVERYONE needs help from time to time
- Keep in mind that we are preparing you to be a professional but we will help you get there

Please review the University's policy on "Student Responsibilities":

<https://policy.umn.edu/education/studentresp>

Academic Civility

Academic incivility has emerged as a serious concern on campuses across the country. Evidence of academic incivility's negative effect on students, faculty, and staff is increasing. It is essential, therefore, that universities address this serious issue and work to ensure campus climates that are conducive to well-being, learning, and productivity.

http://www.sos.umn.edu/Staff_Faculty/academic_civility

Keys to Success in the MLS Program – Time Management and Personal Planning

The senior/professional year of the MLS program is a rigorous undergraduate curriculum that requires a **full-time** commitment of approximately 40-55 hours per week of course participation and study, participation in learning experiences in the community and the classroom. Because of this you will need to strongly consider your employment workload. The Medical Laboratory Sciences curriculum requires excellent time-management and self-initiative from each student. The online components of the curriculum require a high level of self-direction and discipline. Face-to-face learning with instructors consists of laboratories, discussion groups, lectures and clinical experience.

Although many semesters in the MLS Program may have 13, 14, or 15 credits, the workload effort is more closely estimated by the contact hours for our courses. For example, due to the intensity and high performance expectations of our laboratory courses, a 1 credit lab course should be weighted as if it was 3 credits of workload for the 3 hours of laboratory class time. This amount of effort is often underestimated by incoming students so we want you to be aware as you begin to plan your study strategies.

It is also important for incoming students to know that many of their previous study habits (e.g. memorizing facts or studying only for recognition of the answer on a multiple choice exam) will not support their successful progression in the MLS program. Students must thoroughly learn and retain the content of each course and apply it to the situations presented during exams. Be

aware that all MLS courses are integrated in content. This means that information in one course may be applied to others because the field of laboratory medicine is also integrated.

Here are some recommendations we have to help you succeed in our program:

- Read and review course content daily – do not study just for the exams
- Review course materials thoroughly prior to class discussions, active learning activities, or lab exercises
- Study to retain and understand, not just to memorize.
- Understand that by design you may not be able to find the answer directly quoted in your notes or textbook – MLS is about analysis and critical evaluation of information; interpretation and application
- Use the course objectives to guide your study and to critically assess your learning
- *Rehearse* the objectives – don't just read them. Practice testing yourself
- Don't fall behind - each class will continue to layer information from week to week
- Communicate questions or areas needing clarification early to your instructor
- School/Life Balance:
 - Limit work hours as much as possible
 - Get enough sleep and eat properly
 - Exercise
 - Take time out for something you enjoy doing – have some fun too
 - Delegate family responsibilities as much as possible during the semesters – they have a shared interest in your success too
- Remember that the instructors' goal is to help you learn and succeed - seek their help
- Use the University support services
- Meet with your academics and/or MLS Program faculty advisor for guidance and support
- Ask for help along the way. It's okay to ask for and receive support

ACADEMIC PROGRESSION



Academic Requirements

All MLS students are required to comply with the academic progress standards established by the MLS Program in order to make satisfactory academic progress towards completion of the Bachelor of Science, Certificate or Professional Master's in Medical Laboratory Sciences. MLS academic progress policies and procedures also observe all Center for Allied Health Programs, Academic Health Sciences, and University of Minnesota policies and procedures. These policies are also in alignment with the requirements for professional accreditation by NAACLS.

Academic Performance and Professional Behaviors

(approved by OGC 12/26/13 – modified for MLS 7/13/15)

The Medical Laboratory Sciences Program's overall goal is to ensure that its graduates have a strong academic foundation, a sound ethical core, and a robust and integrated set of professional behaviors. The following policies and procedures address scholastic standing within the MLS curriculum. This policy statement outlines student expectations for academic performance and student conduct, including professional behavior standards and academic integrity. Student issues related to academic performance and student conduct are handled through separate processes, and are also described in this policy statement.

Academic Performance

Academic performance expectations in the MLS Program include two components: academic performance standards, and professional behaviors standards. Students are expected to maintain these academic and professional standards throughout the curriculum and during the clinical experience in order to remain in good scholastic standing.

Academic Good Standing

To be considered in **Academic Good Standing** within the MLS Program, students must meet ALL of the following criteria:

- Receive a grade of "C" or higher in all required MLSP courses and elective courses taken outside of the program
- Receive no grades of "N" in any courses (required or elective) once admitted into the program
 - A course grade lower than a C or grade of N indicates that a student has not achieved a level of learning or skills consistent with the basic requirements of the course content and performance standards.
- Consistently meet the Affective Domain requirements
- Does not withdraw from any courses once admitted into the program
- Maintain a semester and overall GPA of 2.00 or higher for undergraduate students (BS or

Certificate) and 2.80 for graduate students (MMLS)

- Is able to continuously comply with the MLS Program Technical Standards
- Adheres to all UMN Student Conduct and Community Standards policies
- Complies with the Safety Standards of the MLS program and safety requirements of all clinical experience facilities
- Maintains compliance with all MLS program non-academic requirements
- Maintain full-time student enrollment status or receive a formal waiver (13 credit exemption) from the program (undergraduate only)

Academic Difficulty

If a student finds themselves in academic difficulties in one or more courses, they must contact and discuss their course performance with the instructor(s) and academic advisor BEFORE the course(s) has ended. Ideally the student should contact the instructor about the performance problem(s) as early in the course as possible. There may be assistance available during the semester, however **once the course has ended the MLS Program academic progress policies must be enforced without exception.**

Mid-Term Alerts

MLS Program faculty will generate a Midterm Alert for students who may be in academic difficulty in one of their courses. Students who receive a Midterm Alert are required to meet with the course director and their academic advisor for assistance and guidance toward successful completion of the course. This may include counseling about study habits, finding a student volunteer for tutoring, referral to University Services, or other assistance as deemed necessary. These assistance measures are not required however the student is strongly encouraged to use the services available toward academic success. Students are responsible for obtaining the assistance they need to be successful.

1. Academic and Non-Academic Probation or Dismissal

Students whose academic performance and/or professional behavior that falls below the MLS Program's stated benchmarks will be reviewed by the Medical Laboratory Sciences Academic Standing Committee, and could result in the student being placed on probation or being dismissed. Students are responsible for knowing the grounds for probation and/or dismissal (see *Table 2*).

a. Probation

A student is placed on probation when the MLS Academic Standing Committee decides the student's academic, behavioral, compliance, and/or professional performance standards fall below the MLS Program's stated benchmarks for a student in Good Standing. Probation formally indicates that a student is in jeopardy of not completing the program. At the same time, it offers a student the opportunity to continue in the program and to resolve the circumstances that interfered with satisfactory academic progress. When the probation conditions require a student to retake a course, the course can be retaken only ONCE. Retaking a course generally delays graduation by one year.

b. Dismissal

Dismissal from the MLS Program takes place under very specific circumstances, and is typically due to significant substandard academic, behavioral, compliance, and/or

professional performance issues. The MLS Academic Standing Committee examines the student's case determines if the student will be dismissed from the MLS Program. The Medical Laboratory Sciences Program Director or designee may attend the committee as a non-voting member to better understand discussion and provide information as requested.

2. Resolving Academic Performance or Professional Behavior Issues

The Medical Laboratory Sciences Program has the right and responsibility of enforcing academic performance standards. Students have the right to due process *after* an academic performance decision is made when there are significant extenuating circumstances, or questions of policy, practice or procedure. Any deviation from the stated academic performance standards is at the discretion of the MLS Director and faculty. The following procedure outlines the stages of the process and is adapted from the University of Minnesota Conflict Resolution Process for Academic Complaints.

a. Request for Reconsideration – Student Appeals

The purpose of a Request for Reconsideration is to allow students a mechanism for bringing significant extenuating circumstances to the attention of the program. Generally speaking such circumstances would be those that had a direct and compelling impact on a student's performance and that were beyond the student's control. Students should complete the Request for Reconsideration form (available at <https://www.alliedhealth.umn.edu/about-cahp/forms-student>) and return the form to Student Services. Documentation is usually required.

b. Formal Complaint

- The purpose of the formal complaint procedure applies to "student academic complaints," which are complaints brought by students regarding the University's provision of education and academic services affecting their role as students.
- Student academic complaints
- Must be based on a claimed violation of a University rule, policy, or established practice
- If alleging discrimination in the University-student relationship, may be filed under this procedure or with the Office of Equal Opportunity and Affirmative Action, but not both
- This procedure does not limit the University's right to change rules, policies, or practices.

Complaints that are Not Covered

This procedure does not apply to student complaints regarding:

- University employment
- Disciplinary action under Board of Regents Policy: Student Conduct Code
- Grades in a course
- Applicant complaints regarding University admission decisions

Relief available under this procedure

Resolution of complaints under this procedure may include student reinstatement or other corrective action for the benefit of the student, including refunds, but may not award monetary damages or take disciplinary action against any employee of the University.

c. Procedure

Please refer to the Student Performance Policies and Procedures available at <https://www.alliedhealth.umn.edu/mls/current-students/handbooks-forms> for the policy and procedure on resolution of academic complaints.

Table 2 - Actions when Academic or Professional Behavioral Standards are not met (Examples)*				
	Incident / Issue	Required Action	Immediate Effect on Enrolled Student	Student Actions - Optional
A	Student was in Good Standing but now:	Student placed on probation	Student is not permitted to continue in the course sequence until the deficient course is retaken successfully. Student must develop a Probation Contract with Academic Advisor or with Director of Clinical Education for clinical courses	
OR	● Earns grade below C or grade of N in a single course			
	● Withdraws from a single course			
	● Fails Professional Behavior requirements			
	● Does not meet Compliance requirements			
	● Is unable to meet the Technical Standards			
	● Fails to complete Incomplete Contract			
	● Violates the safety requirements of campus or clinical education site			
	● MMLS GPA below 2.8			
B	Student was in Good Standing but now:	Student dismissed from Program	Student is not permitted to enroll in MLSP courses or to continue in program	Student has 5 working days to Request Reconsideration (Appeal) from Program Director citing extenuating circumstances or policy violation
OR	● Earns grade below C or grade of N in two or more courses			
	● Earns grade below C or grade of N in one course and withdraws from another course			
	● Withdraws from two or more courses			
	● Two or more factors in section "A"			
C	Student who is on probation contract but:	Student dismissed from Program	As Above in Section B	As Above in Section B
	● Fails to meet the Probation Contract requirements			

*This table is not an exhaustive list of potential factors that may result in program probation and/or dismissal

** Students who are placed on disciplinary probation by the University may also be placed on academic probation

Student Progression

Progression in the MLS Curriculum and Consequences of Probation

The MLS curriculum is sequential in nature and classes are typically only offered in fall or spring semesters and often only once per year. If a student withdraws from a required course during Year 3 of the program or earns a grade less than C in a required course outside the MLS curriculum (e.g. Biochemistry, Genetics, or Microbiology), they may be able to repeat the course in time to maintain their eligibility to progress to Year 4 of the MLS curriculum.

Successful completion of a course requires the student to meet the course requirements as stated in each course syllabi. A Withdrawal, grade less than C, or grade of N in a MLSP course typically impedes a student's progression and delays their graduation by one full academic year. This is because students must successfully complete each MLSP course with a grade of C or better before moving on to the next course in the sequence. Students must successfully

complete ALL didactic and campus laboratory courses as well as all University requirements (e.g. Lib Eds) before they are eligible for enrollment in Clinical Experience courses.

Progression in the MMLS Curriculum and Consequences of Probation

The MMLS curriculum is also sequential in nature and students must follow the advising plan that was developed on entry into the program. Withdrawal from courses, N grades, or grades less than C have the same consequences. Additionally, students in the MMLS program must maintain a minimum GPA of 2.80 to graduate from this degree plan. Students who do not meet the requirements will be placed on Probation.

Probation Contracts

Students on probation must complete a contract for academic or behavioral performance, developed toward successful completion of the MLS program. The Probation contract will specify which courses (if appropriate) will be repeated and which semester they must be taken. Students who are on probation due to issues related to professional behaviors, will have a similar contract developed outlining the remediation required to meet program requirements. All probation contracts must have final signature approval of the MLS Program Director.

Notification Process

Students will be notified in writing of their probation or dismissal by the MLS Program Director by university email. The email letter will include directions to the appropriate section in the Student Handbook and other program or University policies that apply.

Program/Course Withdrawals

Withdrawal from the MLS Program

Students have the right to request a withdrawal from the MLS Program and **must contact their academic advisor** for information **before withdrawing** from any courses. It is important that students discuss their situation with their academic advisor so students are aware of the consequences or impact of withdrawal in advance. If a student chooses to withdraw from the MLS Program, they will need to go through the readmission process if he/she wishes to continue in the program at a later time. MLS students are responsible for providing notification to course instructor(s) when a withdrawal request has been approved.

Withdrawal from Individual Courses

Once a student has been admitted into the MLS Program they are expected to complete all courses in which they are enrolled. **Students must consult with their academic advisor before withdrawing from any course.** If a student withdraws from a required or an elective course, they will be placed on Academic Probation within the program. For this reason it is essential that students work with their academic advisor to develop a plan of study that will allow them to be successful each semester. If students wish to withdraw from a lecture course, they must also withdraw from the corresponding laboratory course.

Leave of Absence

An official leave of absence is now required for all undergraduates who do not enroll for one or more semesters (excluding summer). Students who are absent one or more semesters without

an approved leave of absence will not be able to register when they return and must apply for readmission into their program. Students should consider a Leave of Absence in lieu of withdrawing from the MLS Program, if appropriate. Students considering a Leave of Absence should consult with their academic advisor for guidance.

Non-Enrollment

Students who fail to register for a semester (excluding summer) and who have not been granted a leave of absence or whose leave of absence has expired will be dismissed from the program. Students must apply for readmission to complete any remaining program requirements. Students who are readmitted must meet the requirements of the current program admission's plan.

Lab Safety Review

Lab safety training and review is required on an annual basis. Students who are on a Leave of Absence or who need to repeat MLSP classes, must repeat Lab Safety training prior to returning to lab classes and/or clinical rotations.

Student Appeals

Reconsideration and/or Appeal of MLS Program Actions

Students in the MLS program can discuss their situation with Student Services. If a student has been placed on Probation or has received a notice of Dismissal from the MLS program, the student has the right to have their situation reviewed, and should talk to their academic advisor as the first step in the process.

Readmission

Students dismissed from the MLS Program have the option of reapplying; however, readmission to the program is competitive with all other candidates for that year, and contingent on evidence that factors that led to the original dismissal have been corrected. For students dismissed due to academic performance, it may be helpful for students to demonstrate successful completion of upper division science courses with a full credit load outside MLSP as evidence that they are ready academically and professionally for success. Students readmitted to the program that have been previously dismissed will be readmitted on a probationary status and will be expected to complete the terms outlined in the probation contract included with the offer of admission. Failure to complete probationary conditions in the probationary semester will result in immediate dismissal.

Student Conduct

(approved by OGC 12/26/13 – modified for MLS 7/13/15)

Student conduct and professional conduct may be covered under the University of Minnesota, Board of Regents Student Conduct Code, as well as the professional and ethical standards of the MLS program. The MLS Program does not maintain its own student conduct policy, except under the terms of program standards related to professional conduct. Professional behavior that is evaluated as part of a course or other experiential component of the degree program falls into the academic category of student performance and is handled under the respective

policies and procedures outlined in the Academic Performance section above.

Student Conduct Code

Several areas of the Student Conduct Code are of particular importance to students enrolled in the MLS Program.

- a. Academic integrity is essential to positive teaching and learning. Students are responsible for ensuring scholastic honesty in their work at all times. Students engaged in scholastic dishonesty will be penalized and reported to the Office for Community Standards (<https://communitystandards.umn.edu/>).

The University's Student Conduct Code defines *scholastic dishonesty* (their term for academic misconduct) as "...plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis." (https://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf)

Plagiarism is defined as the presentation of another's writing or ideas as one's own. Plagiarism can result in a grade of "F" or "N" for the entire course. Students are urged to be careful that they accurately attribute and cite others' work in their own writing using the preferred format designated by the Program. For guidelines for correctly citing sources, go to <https://libguides.umn.edu/tutorials/> and go to "learn about citations".

In addition, each course demands *original work*. Unless agreed to by the current Course Director, it is unacceptable to hand in assignments for any course when credit has been received previously in another course. It is, however, acceptable to build on a line of work begun in another course or leading to a scholarly project. If you have any questions, consult with the Course Director.

- b. The MLS Program also considers any behavior by an MLS student that reflects on the student's qualifications or potential to become a competent and ethical professional within the jurisdiction of the program. Aside from matters of academic integrity and professional responsibility in the classroom/clinic setting that are handled through the Student Conduct Code, the following behaviors constitute ground for discipline of students:
 - Conduct that violates professional and or ethical standards;
 - Violates the safety requirements
 - Disrupts the operations of the University, College of Pharmacy, MLS program or clinical experience training sites;
 - Disregards the rights or welfare of patients, fellow students, college/clinical staff, or other individuals.
 - Unlawful conduct or other improper behavior that impairs the student's capacity to function as a healthcare professional.

Specifically, any violation of the following codes or practices is considered unprofessional and could result in probation or dismissal.

- ASCLS Code of Ethics
- Clinical Experience site policies and procedures
- Ethical rules and procedures related to research
- MLS Program Honor Code

Process for Student Conduct Issues

It is hoped that in most cases, this process will resolve the concerns. However, if this is not the case or if the misconduct is serious or repeated, the involved faculty, clinical educator, or administrator may seek broader faculty involvement (see below).

b. Independent action

When a faculty member, clinical experience preceptor, academic advisor, or administrator has concerns about a medical laboratory sciences student meeting any of the standards of conduct, he or she will:

- Discuss the concerns directly with the student and work to resolve the issues (including but not exclusive to designing plans of current action to resolve the problems and additional action to avoid the problems in the future);
- Document dates and content of key communications and meetings(s) with the student; and
- Create a written plan for resolving concerns, with student's verification of receipt.
- Academic advisor will maintain a copy
- Academic advisor will follow-up during that semester and subsequent semesters.
- File the appropriate form with the Office of Community Standards if the concern meets that office's criteria.

c. Affective Domain Assessment

The MLS Program requires that students behave with professionalism and conduct themselves as would be expected of a medical laboratory scientist in the workplace. Professional behaviors fall under the scope of academic performance standards. Professional behavior is expected throughout the curriculum. This includes but is not limited to classroom sessions, online interactions, clinical experiences, public/professional engagement experiences and program supported activities. Professional behavior is assessed through a variety of mechanisms and is evaluated within courses and across the curriculum. In all courses, student affective behavior will be assessed throughout the semester as a competency. Student evaluation and feedback will be provided at least twice during the semester (including a final evaluation).

Failure to meet minimum thresholds will result in course failure.

The Course Director or student's academic advisor should also file appropriate

Office of Community Standards forms if the concern meets that office's criteria.

In MLSP 5311, affective domain assessment of each student will occur:

- At the discretion of faculty/course director throughout the semester including:
 - Meeting with faculty/course director as needed.
 - Performance Improvement Plan (PIP) as needed.
- Midterm Evaluation (ungraded):
 - Performance Improvement Plan is required for:
 - Any ratings of "Does not meet expectations"
 - More than 3 ratings of "Partially meets expectations"
- Final Evaluation (ungraded):
 - Meeting with Course Director/Instructor required:
 - 1 or more rating of "Does not meet expectations"
 - More than 3 rating of "Partially meets expectations"

In MLSP 5112 & MLSP 5213, affective domain assessment of each student will occur:

- At the discretion of faculty/course director throughout the semester including:
 - Meeting with faculty/course director as needed.
 - Performance Improvement Plan as needed.
- Midterm Evaluation:
 - PIP is required for:
 - Any rating of "Does not meet expectations"
 - More than 3 ratings of "Partially meets expectations"
- Final Evaluation:
 - Failure to pass course results when:
 - No demonstrated improvement based on PIP.
 - 3 or more rating of "Does not meet expectations"

In MLSP 5514 & MLSP 5312, affective domain assessment of each student will occur:

- At the discretion of faculty/course director throughout the semester.
 - Meeting with faculty/course director as needed.
 - PIP as needed.
- Midterm Evaluation:
 - PIP required:
 - Any rating of "Partially meets expectations"
 - Any rating of "Does not meet expectations"
- Final Evaluation:
 - Failure to pass course:
 - No demonstrated improvement based on PIP.
 - Any rating of "Does not meet expectations"

If a Performance Improvement Plan (PIP) is required:

- List of behaviors not meeting expectations
- Provide examples of student behavior
- Describe expectations and performance improvement plan
 - Failure to meet and maintain the expectations detailed above may result in additional corrective action, up to and including failure of the Course.
- Timeline for improvement and check-in with student
- Schedule check-in with student to re-assess performance
- Signature lines for faculty, student for initial, and check-in
- Scan and send to student with cc to cahpadv@umn.edu
- Academic advising keeps records

When a Performance improvement plan (PIP) is required by the student, they must:

- Maintain all other required technical standards and affective behaviors through the duration of the course.
- Demonstrate improvement in highlighted areas.
- Faculty: Include timeline for plan including check-ins with student and updating feedback.

Committee Review of Misconduct

- i. The Academic Standing Committee may review the pertinent materials, communicate with the student (e.g., face to face, telephone, virtual meeting) and seek clarification from involved faculty and advisor as needed regarding student misconduct. The Academic Standing Committee consist of three (3) voting faculty members, the MLS Program Director (ex-officio) and the advisor(s) (ex-officio) of any student under consideration for academic standing action.
- ii. The Committee will hold a hearing to determine whether the student has committed misconduct and if so, will report it to the Office of Community Standards and recommend action to be taken.
- iii. The Committee will provide to the Program Director a written report of both the majority findings/recommendations and the minority findings/recommendations (if any).
 - a) If the Committee's finding is one of misconduct, their recommendation of action to the Office of Community Standards may take many forms, including but not exclusive to:
 1. No action
 2. Permitting uninterrupted continuation of academic work on probation, stipulating behavioral expectations.
 3. Requiring that the student meet certain conditions before permitting them to resume academic work (with or without probation). These may commonly include:
 4. Requiring that the student take a leave of absence;
 5. Suspending the student from academic work until specified conditions are met;
 6. Requiring that the student complete additional or specially designed internal or external coursework or programs.
 7. Dismissal

Sanctions for Honor Code Violations

Like the University of Minnesota Policies for Academic Dishonesty in the classroom, students who violate the MLS Program's Honor Code will be subject to sanctions based on the level of infraction at the discretion of the course director. Within the course an instructor may give a grade of zero for the assignment or unit along with discussion about future behavioral expectations. Students will be placed on Program probation with documentation of a single infraction (see also Affective Domain). Repeated infractions in one MLS course or in multiple MLS courses will result in Program dismissal due to Academic Dishonesty. This may be noted on the student's transcript.

Academic Integrity

(See also Honor Code and Academic Performance and Professional Behaviors)

Students are responsible for maintaining scholastic honesty in their work at all times. Students engaged in scholastic dishonesty will be penalized and reported to the Office for Community Standards. <https://communitystandards.umn.edu/>

Scholastic dishonesty means plagiarism; cheating on assignments or examinations, including the unauthorized use of online learning support and testing platforms; engaging in unauthorized collaboration on academic work, including the posting of student-generated coursework on online learning support and testing platforms not approved for the specific course in question; taking, acquiring, or using course testing materials without faculty permission, including the posting of faculty-provided course materials on online learning and testing platforms, submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

Artificial intelligence (AI) language models, such as ChatGPT, and online assignment help tools, such as Chegg®, are examples of online learning support platforms: they cannot be used for course assignments except as explicitly authorized by the instructor. The following actions are prohibited in this course [remove bullets as necessary]:

- Submitting all or any part of an assignment statement to an online learning support platform;
- Incorporating any part of an AI generated response in an assignment;
- Using AI to brainstorm, formulate arguments, or template ideas for assignments;
- Using AI to summarize or contextualize source materials;
- Submitting your own work for this class to an online learning support platform for iteration or improvement.

If you are in doubt as to whether you are using an online learning support platform appropriately in this course, you should discuss your situation with your instructor.

Any assignment content composed by any resource other than you, regardless of whether that resource is human or digital, must be attributed to the source through proper citation.

(Examples of citing content composed by digital tools are presented in: libguides.umn.edu/chatgpt [or provide an alternative reference appropriate for your class].)

Unattributed use of online learning support platforms and unauthorized sharing of instructional property are forms of scholastic dishonesty and will be treated as such.

Plagiarism is an important element of this policy. It is defined as the presentation of another's writing or ideas as your own. Serious, intentional plagiarism will result in a grade of "F" or "N" for the entire course. Students are urged to be careful that they properly attribute and cite others' work in their own writing. For guidelines for correctly citing sources, go to <http://tutorial.lib.umn.edu/> and click on "Citing Sources".

In addition, original work is expected in every course. It is unacceptable to hand in assignments for any course when credit has been received previously in another course unless by prior agreement with the instructor. Building on a line of work begun in another course or leading to a thesis, dissertation, or final project may be acceptable but requires course director approval in advance. If you have any questions, consult the instructor.

Online exams in MLS courses often use Proctorio within the Canvas course site. When an Instructor utilizes the recording feature in Proctorio for an exam, the student must show their entire face during the examination period and must follow the instructor's instructions for the removal of other devices from the exam area.

Integrity is a critical aspect of all allied health professions, and the integrity of laboratory results can affect patient care and patient survival. If a student provides false personal information as a rationale for requesting special consideration on a test or other assignment, this situation will be referred to the MLS Academic Standing Committee, and the student may be dismissed from the program, based on the ruling of this committee.

STUDENT COMPLIANCE



To enter into and continue in the Medical Laboratory Sciences Program students must meet the academic (see academic progression) and non-academic requirements.

Compliance with Non-Academic Requirements

Immunization Requirements for Academic Health Science Students

Students participating in clinical rotations are required to meet University of Minnesota, MLS Program, and Clinical Affiliate compliance requirements. Compliance documentation must be provided to each entity and individual clinical affiliate. Documentation requirements for the University of Minnesota must be submitted to Boynton Health, the MLS Program in the Exxat software platform, and to specific

affiliate software platforms as instructed following clinical rotation assignments.

Medical Laboratory Sciences students must comply with the [Academic Health Science Immunization Requirements](#). Note all students participating in clinical rotations are required to receive an annual flu vaccination and documentation of a test for tuberculosis. These requirements are necessary to comply with Occupational Safety and Health Administration (OSHA) regulations, Centers for Disease Control and Prevention (CDC) guidelines, Academic Health Center policy, and contracts with clinical fieldwork sites.

Admitted students MUST complete immunization requirements PRIOR to enrolling in the first semester and keep them up- to-date throughout enrollment in the curriculum. Failure to complete all required immunizations before the **first day of the first semester** will result in rescinding the offer of admission to the Program. Individuals unable or unwilling to comply with the immunization requirements will not be allowed to enter the program, participate in clinical placements, and progress to graduation from the Medical Laboratory Sciences Program. ***There are no exceptions/waivers to this policy.***

MLS students must complete the following vaccination requirements prior to their program start date and maintain compliance throughout the length of the program:

- Measles (rubeola), mumps and rubella (two doses), or positive titer; (*University requirement*)
- Diphtheria/Tetanus (Td) dose in the last ten (10) years; (*University requirement*)
- Chicken pox (varicella) series, documented positive history, or positive titre;
- Pertussis later than 2005;
- Hepatitis B series or documented immunity;
**Please Note: The Hepatitis B vaccination is a series of 3 shots over a 6 month period of time. The 2nd shot cannot be taken until at least 1 month after the 1st vaccination. The third shot (booster) is taken 6 months after the 1st. You must have at least the first 2 vaccinations prior to entering into MLSP courses.*
- Evidence of tuberculosis test, or in the case of a positive TB test, results of a normal chest x-ray dated after the TB test, completed within six months prior to program start date

The annual immunization compliance requirements include:

- Annual influenza vaccination, to be completed by November 1 each year

Exceptions will be made only when there is a shortage of vaccines. Students will be required to comply once vaccine supply levels allow for vaccination.

- The University of Minnesota does not require Covid immunizations. However, clinical affiliates continue to require Covid immunizations. Therefore, the initial series of Covid vaccines are a MLS Program requirement. Boosters requirements are dependent on individual clinical affiliate requirements.

Newly admitted students should have their healthcare provider complete the AHS Immunization form and submit the form to Boynton Health Center. The form can be obtained at the link below. Please make sure to keep a copy for your records.

<https://boynton.umn.edu/immunization-requirement>

MLS students are responsible for maintaining copies of immunization records. In accordance with federal law and University of Minnesota policy, if the MLS program receive requests for

student immunization from affiliate health care agencies/organizations, such requests will be referred directly to the student.

Criminal Background Studies

In accordance with Minnesota state law, criminal background studies are required on all students admitted to the Center for Allied Health Programs. Failure to pass the NETStudy 2.0 background study may prevent successful completion of the program.

Based on amendments to the Vulnerable Adult Act in 1995 and 1996, Minnesota Law requires that any person who provides services involving direct contact with patients and residents at hospitals, nursing homes and other health care facilities licensed by the Minnesota Department of Health have a background study conducted by this state agency. Education programs are authorized to initiate the background studies on their students as an alternative to each licensed facility requesting the studies. When requested by an educational program, they may be sent to every clinical site in which a student completes their clinical experience.

Student Services will contact you via email to notify you that it is time to initiate your criminal background study, and that you need to read the associated Privacy Notice. Minnesota background checks will be conducted when you first enter the program. If you believe you may have circumstances which may affect your NETStudy 2.0 background study, please contact your academic advisor right away.

Visit the State of Minnesota Department of Human Service Criminal Background studies website for more information at <https://mn.gov/dhs/general-public/background-studies/>.

Directions to complete the Criminal Background check:

1. Student Services will contact the student via email when the student should self-initiate their criminal background study. You will need to read the associated Privacy Notice and initiate the Background Study before the first semester in the MLS program. You will be notified if any further action on your part is necessary. If you believe you have an issue with your Background Study, please contact Student Services by email at cahpcpliance@umn.edu.
2. Once the study has been completed, the State of Minnesota provides documentation of the criminal background study to the MLS program and to each student. It is the student's responsibility to keep copies of criminal background study records.

Secondary Background Checks

Some clinical affiliates have additional requirements that require additional background checks. Additional background check requirements may include a Wisconsin Caregiver Background Check or a National Background Check. Instructions are provided in Exxat. Students are notified in spring semester if they will be attending a clinical rotation that requires additional checks.

Safety Training & Safety Compliance

Due to the biohazard nature of the materials used in our laboratory courses, -all students must maintain compliance with safety training requirements and adhere to safety protocols at all

times. Failure to comply will result in program dismissal.

Students must complete a variety of safety training modules prior to the beginning of MLSP courses and some repeated annually until completion of the MLS program to remain compliant with both University policy and clinical affiliate requirements (e.g., Blood Borne Pathogen Training). Students will complete both online and in-person safety modules including Blood Borne Pathogens, Chemical, Fire, TB, Sharps, and other required content. Blood borne pathogens training is required annually and prior to the clinical experience semester assigned. The Department of Environmental Health and Safety <http://www.dehs.umn.edu/> requires all faculty to have annual training and conducts safety inspections of all teaching laboratories.

Attendance is a key issue for safety in the student laboratories. Students must arrive on-time and ready to begin laboratory work at the designated time. Students who arrive late to laboratory classes may be denied access for safety reasons.

A single incident violating the safety requirements of the teaching laboratory will result in a written warning or may lead to program probation dependent on the severity. Repeated violations of safety policies will result in Program dismissal.

Health Insurance Coverage

The University of Minnesota requires all admitted students to have hospitalization insurance. Students who are enrolled less than full-time or who are taking clinical experience courses should consult with the Student Services Advisor to ensure that they have coverage during their time in the clinical facilities. Information about the Student Health Benefit Plan can be located at the Boynton Health Service website: <https://shb.umn.edu/>. At registration, students are automatically enrolled in the Student Health Benefit Plan if they are enrolled in more than 6 on-campus credits and will be charged for the cost of the plan.

Details on requesting a waiver are available at the Boynton website. *You must request an insurance waiver by the registration deadline or the insurance fee is non-refundable.* You can obtain information about dependent care coverage by contacting the Student Health Benefits Office.

Students who are enrolled for less than 6 on-campus credits or who are enrolled in clinical practicum courses must ADD the student services medical coverage to their registration if they are not covered by private medical insurance.

ALL ACADEMIC AFFILIATE STUDENTS MUST HAVE MSU-Mankato, SCSU, and UW- River Falls INSURANCE.

Long-term Disability Insurance Coverage - Medical Laboratory Sciences students will be covered automatically under a group Long Term Disability plan while a student. You will see a charge for this coverage on your student account once at the beginning of each fall and spring semester. *This fee is required and is non-negotiable.* For complete details on the Guardian long-term disability insurance coverage visit: <https://shb.umn.edu/students-and-scholars/ahc-disability>.

ALL AFFILIATE STUDENTS MUST HAVE MSU-Mankato, SCSU, and UW- River Falls INSURANCE.

Upon graduation students will have the opportunity to convert to an individual Long Term Disability plan. This means students can obtain individual coverage that they own and take with them after they graduate. AHC students can enroll regardless of any pre-existing medical conditions. AHC Long Term Disability members have the opportunity to enroll in this post-graduation option 60 days prior to their graduation and up to 60 days after their group plan ends. Estimated monthly benefit amounts are listed by school in our brochure.

Health Insurance Portability and Accountability Act (HIPAA)

The University of Minnesota is committed to protecting the privacy of individual health information in compliance with all applicable laws and regulations. To achieve this end, the University has adopted policies and procedures to protect the privacy of individual health information. The University has provided for designation of a Privacy Officer and Privacy Coordinators to carry out such policies and procedures in an effort to ensure the privacy and security of individual health information at the University.

To comply with the HIPAA privacy regulations, and to fulfill the goals of fostering an environment at the University of Minnesota that is sensitive to the privacy of individual health information, every University of Minnesota student, faculty member, researcher, and staff person who may have access to protected health information will complete one or more online courses about privacy and data security.

HIPAA is a federal law and the requirements apply to all health care providers and insurers nationwide. The University online training will train students on HIPAA's privacy requirements and computer security, will be a benefit to students in their experiential training, and will be attractive to future employers who are required to comply with HIPAA's requirements. All AHS students will be required to view the HIPAA Privacy and Security video and complete the Safeguarding PHI on Computers online course. Additional training requirements will depend on your job duties and the settings in which you may have access to individual health information and may include online courses about privacy of individual health information in research and clinical settings.

Members of the University community who are required to complete training will receive an email from their Privacy Coordinator and/or a Human Resources representative with specific information regarding the training schedule. Your Privacy Coordinator will be able to assist you through the training process as needed. You should also refer to the frequently asked questions section of the University of Minnesota's Privacy and Security Project website.

How to Access Training

MLS students enter training through the "MyU" portal and receive notification via email when training is available online. Selected portions of the privacy and security training may also be incorporated into various MLS courses in the program.

Rights and Responsibilities for Persons who Access Individual Health Information

Certain members of the University community require access to individual health information in the course of carrying out their job role, conducting research or participating in educational programs. Persons with access have a responsibility to understand their obligation to protect

the privacy of individual health information that has been entrusted to them and are responsible for complying with all relevant University of Minnesota policies and procedures, as well as all current state and federal laws.

Persons with access to individual health information are responsible for the following:

- Comply with all University policies and procedures and state and federal laws related to privacy of individual health information.
- Complete all required training on policies, procedures and state and federal laws related to privacy of individual health information.
- Use or disclose individual health information only as permitted or required by the University or health care component policies and procedures or state and federal law.
- Workforce members who perform duties for both a covered health care component of the University and non-covered component will not use or disclose PHI created or received in the course of work for the health care component in a prohibited manner.
- Consequences of Violations: Alleged policy violations will be referred to the appropriate University investigative or disciplinary units. Depending on the nature and severity of the offense, policy violations may result in loss of privileges,

The University has disciplinary action up to and including termination of student status and referral for criminal prosecution for violation of these responsibilities. Additional responsibilities will apply for students who have access to individual health information in clinical settings or in the course of performing research. The University policies and procedures should be consulted for more comprehensive information about protecting individual health information at the University of Minnesota.

Computer and Technology Requirements

Due to the hybrid curriculum delivery method in the MLS Program, admitted students are expected to be highly competent in using a computer to generate, type, edit, format, and print documents. All students in the MLS program must have consistent and reliable access to a computer and the Internet. The University of Minnesota offers a variety of software options to enrolled students, including Microsoft Office software and Internet services. Visit <https://it.umn.edu/services-technologies/technology-help-students> or complete details.

Technical Ability Requirements

Due to the hybrid and online delivery format of all Medical Laboratory Science courses students in the MLS program must have **consistent and reliable access** to a computer and the Internet. Students in the MLS Program must maintain a minimum level of capacity and flexibility with computer equipment and other technological issues.

Please note that not all course modules online are compatible for use with tablets or smart phones

- Abilities – to support file exchange between students and the instructor
- University of Minnesota Email
 - The ability to use the University web-based email program to send and receive messages and attachments
 - Upload/Download file to computer from email or course assignments

- Calculator
 - A simple, non-programmable statistics calculator for use during exams.
 - Cell phone or tablet calculators are not acceptable
- Required Technical Abilities
 - Retrieve, download and upload basic software files (Word, Excel, PPT, PDF, etc.)
 - Develop a text-based document with correct spelling and grammar and using appropriate terminology of the laboratory medicine field
 - Generate, modify, and save a document in Word, Excel, or PowerPoint
 - Use Excel to develop graphic representations of laboratory data
 - Convert documents to pdf format
 - Use email as a form of communication with instructors and peers applying Netiquette to all forms of electronic communication

Email Communication and Competencies

UMN Policy Statement

The University provides students with an email account upon matriculation to the institution. This account is free of charge and remains available at minimum while the student is enrolled or is active in their degree program. The University-assigned student email account is the University's official means of communication with all students. Students are responsible for all official information sent to their University-assigned email account. If a student chooses to forward messages to another account, the student is still responsible for all information, including attachments.

Reason for Policy

Email is the primary method of communication between students and the University. It is imperative that students understand that information will be communicated to them via their University-assigned email account while they are students. New students are informed that their University-assigned email account is the primary means of communication from the University community and that they will be held responsible for the information in the email.

MLS Policy

The University-assigned student email account is the official means of communication between the College of Pharmacy, the MLS program and all students. Students are responsible for all information sent via the University assigned email account. Students are required to check their UMN email account daily for communications about program issues, personal issues, and updates. If a student chooses to forward the University email account, he/she is still responsible for all the information, including attachments. Forwarding is not recommended.

Failure to respond to email queries within 48 hours is considered to be in non-compliance with Professional Behavior requirements of the program.

Netiquette – Expectations for Electronic Communication

Netiquette is defined as a *philosophy of effective internet communication that utilizes common conventions and norms as a guide for rules and standards*. Over the past several years, a few guidelines regarding the polite, constructive conduct of online communication have become widely accepted. Netiquette helps to make electronic messages easier to understand by

suggesting some conventions for language and usage. Because the MLS program is delivered in a hybrid (partially online) format and many of the communications between students and faculty take place in the electronic domain, it is essential that we develop a set of expectations for how this should occur.

Here are some basic rules and requirements for electronic communications (email, Canvas discussion forum, etc.) that will support a positive learning environment for all. One of the key things that we now need to understand is that email in the MLS program is all considered “formal” and should be treated as such.

Get in the practice of appropriate communications as these guidelines will be essential for the workplace after you graduate.

- Use the subject line to describe your purpose – required for all email or discussion threads
- Use an appropriate greeting – examples – Hello – followed by their name
- Make sure you end with your name – we don’t know your X.500
- Use appropriate capitalization, sentence, and paragraph structure
- Spell and grammar check before sending
- Do not use all CAPS – it seems like you’re yelling
- Do not send communication without capitalization or punctuation – difficult to understand
- Tell the truth – don’t embellish or expand for effect – keep to the facts
- Be respectful and polite – you can disagree without anger or personal attacks
- Do not flame – that is do not send angry emails as a reaction – pause, think, evaluate, ignore
- Do not spam – do not send irrelevant material in course emails
- Minimize the length – summarize - if you need a long explanation do that in person
- Do not send email at night or right before an exam expecting a response
- Use discretion on who is copied for email
- Always keep your responses constructive and on-topic
- No whining about grades or begging for points – if you have legitimate issues please bring them to our attention
- Keep your responses jargon-free – please do not use slang or “texting” abbreviations

GENERAL POLICIES & RESOURCES



Absence from MLS Courses and Request for Make-Up Work

University policy recognizes that there are a variety of legitimate circumstances under which students will miss coursework, and that accommodations for makeup work will be made when appropriate. Students must notify their instructors of circumstances leading to a request for makeup work as soon as possible and provide information to explain the absence.

Students are responsible for planning their schedules to avoid excessive conflict with course requirements. Some situations will be sufficiently urgent that arrangements for makeup work cannot be made prior to the date of an absence. In such cases, arrangements should be made as soon as possible following the student's return. The instructor has the right to request verification for absences. Instructors are not obligated to accommodate a student who has missed so much of the critical components of a course, even for legitimate reasons, that arrangements for makeup work would not be reasonable.

Because the MLS Program is a professional accredited medical education program students are required to attend all laboratory sessions as well as all scheduled lecture course activity sessions. MLS Program policy requires verification (documentation) to support the legitimacy of the absence and request for make-up work. Please see the University Policy on Makeup work for more information. <http://policy.umn.edu/education/makeupwork>

Absence for Participation in Religious Observances

The University of Minnesota permits absences from class for participation in religious observances. Students who plan to miss class must:

1. Inform instructors of anticipated absences no later than 7 days after the start of a course semester;
2. Meet with instructors to reschedule any missed examinations; and
3. Obtain class notes from other students.

Instructors are expected to assist students in obtaining course materials and assignments distributed during class sessions and to make arrangements for taking missed examinations. More information can be found at: <https://eot.umn.edu/policies>

The above policy is pertinent to the University of Minnesota, however MLS students participating in their clinical rotations at other sites that may have different policies. Should you wish an accommodation for religious observance during your clinical rotations, you must request the accommodation through the Education Coordinator by April 1st of the spring prior to the onset of your rotations. The clinical education coordinator will work with you to resolve the matter in the best possible manner, however not all accommodations may be reasonable

within the limitations of clinical assignments.

In order for an accommodation to be considered reasonable, however, it must meet four criteria:

- It must not compromise essential requirements of a course, program, job, activity, or facility.
- It must not cause an undue administrative or financial hardship.
- It must not compromise safety of the student or others.
- It must not fundamentally alter a course or program.

The MLS Program faculty and staff fully support accommodations for students for religious observances. Please contact the faculty course directors at the beginning of the semester and consult Student Services to discuss your accommodation needs.

NOTE: Because preparation of laboratory exercise materials is time consuming and supplies may be limited, it may not always be reasonable to provide make-up sessions for multiple missed laboratory sessions.

Address and Name Changes

Address changes should be made online via One Stop. Students may have more than one address on file (e.g. permanent home address, mailing address, diploma mailing address). MLS students must update their contact information as soon as possible because program information is sent using the contact information provided through One Stop. Name changes forms are also available through One Stop forms.

Cancellation of Courses and Tuition Refunds

Course cancellations are effective the day they are processed and strictly follow the dates listed on the refund schedule (exceptions are not made for classes that have not yet met for the week). See the University of Minnesota Academic Calendar included in this manual for specific dates.

A tuition refund will be based on the date the course is officially canceled (by canceling online or by taking a complete [Registration and Cancel/Add form](#) to a One Stop location), not on the date you stopped attending class. **Students are required to consult with a Program staff PRIOR to dropping a MLSP or prerequisite course. Failure to discuss this with your academic advisor or the Program Director prior to dropping the course OR dropping a course to avoid an unsatisfactory grade will result in Program Probation and may lead to dismissal.**

Exceptions to the Cancellation/Tuition Refund Schedule on the University Academic Calendar are handled by an appeal process through the University of Minnesota Academic Support Resources Office and One Stop. When a student has a documented extenuating circumstance to report the appeal should be filed using the [Tuition Refund Appeal Form available on One Stop Forms Online](#).

Class Picture

During the MLS Student Program Orientation, a photograph will be taken of each MLS student for the following purposes:

- For faculty reference in class
- For student community building
- For identification and security at clinical sites

Each student must submit an Authorization for Photography, Videotaping, and Interviewing form to Student Services.

Concerns or Complaints

Instructors have a responsibility to establish and maintain a civil, productive, inclusive, and stimulating learning environment. Both instructors and students have a fundamental obligation to respect the instructional setting as a place for civil, courteous discourse. The MLS Program wishes to maintain an open and constructive environment for student learning and academic discourse. As such we encourage students to discuss concerns or complaints with their instructors and/or academic advisor at any time.

As a future health care practitioner it is essential that students understand how to bring concerns forward in a constructive manner as this will be a necessary skill for their career. Voicing concerns in a professional manner is considered part of the behavioral expectations of students enrolled in the MLS program and for program graduates. It is also essential that the MLS Program provides students with a safe environment to voice their concerns and guidance in addressing their concerns.

On occasion, students may have questions, concerns, or complaints about situations that arise in the classroom, whether in the physical or online environment. The MLS Program takes students' concerns very seriously and each concern or complaint will be addressed courteously, promptly, and with sensitivity. If the concern is related to a course, students are encouraged to first bring these issues to the attention of the instructor or the individual involved in an attempt to resolve the issue at this level. Students may also bring their concerns to their academic advisor or faculty career advisor at any time. Their advisor can act as a consultant; provide advice or perspective about their concerns, or if necessary, act as an intermediary. These situations may have developed due to a misunderstanding or miscommunication between individuals. Talking things out together may bring better understanding to both parties. It will also provide the MLS program with information for continuous improvement.

After discussion with their academic or faculty career advisor, the student may choose several options as next steps:

- The student, with guidance from their academic advisor, may bring the issue to the other individual for discussion
- The advisor may bring the issue forward on the student's behalf to the instructor or Program Director
- The student may reconsider their concern based on discussion with the advisor
- If the student feels that their concerns were not addressed adequately through this process, they may choose to report the incident directly to the MLS Program Director

Please note: A record of the students' concerns will be kept as a part of the MLS program's evaluation process. (See also Conflict Resolution)

Complaint Process within the MLS Program

A complaint may be filed when the conduct of another individual has the purpose or effect of substantially interfering with an individual's academic performance, or of creating an intimidating, hostile, offensive or disruptive environment in which to learn; unfair or inequitable grading or classroom treatment.

Determining what constitutes inappropriate conduct under this policy will be accomplished on a case- by-case basis and depends upon the specific facts and the context in which the conduct occurs. After receiving a complaint concerning an incident or behavior, the instructor or advisor will gather background information to help inform discussion.

- Even if the complaint is verbal in nature, a written documentation file of the occurrence must be initiated. This documentation must include the date, time, location, individuals involved in the complaint itself and possible witnesses, as well as the nature of the incident causing the complaint. This documentation should also include the date and time of the actual complaint.
- If at all possible, the complaint should be managed within the MLS Program. This will provide a mechanism of discussion directly by parties involved and within context of the program's requirements.
- After gathering appropriate information, the Program Director will discuss a possible resolution with both parties. Note that many times complaints may be rooted in misunderstandings and/or confusion and misinterpretations. In those cases, the role of the Program Director may be that of a mediator for clarification between the parties involved.
- If the individual making the complaint requests it, the complaint will go to the Student Affairs Committee to investigate the complaint and manage the resolution of the matter.
- Dates and times of discussions, meetings, resolutions, should all be recorded in the complaint incident file.
- At the completion of the investigation, a recommendation will be made to the individuals involved as well as the appropriate management regarding the resolution of the matter.

Confidentiality

The MLS Program and University of Minnesota recognize that confidentiality is important. However, confidentiality cannot always be strictly guaranteed. The administrators, faculty or staff responsible for implementing this policy will respect the privacy of individuals reporting or accused inappropriate conduct to the extent reasonably possible and will maintain confidentiality to the extent possible.

Examples of situations where confidentiality cannot be maintained include, but are not limited to, necessary disclosures during an investigation, circumstances where the University is required by law to disclose information (such as in response to legal process), or when an individual is in harm's way.

Retaliation

Retaliation against an individual, who in good faith reports a complaint or provides information in an investigation about behavior will not be tolerated, and may be grounds for discipline.

Retaliation in violation of this policy may result in discipline up to and including termination and/or expulsion.

Any employee or student bringing a complaint or assisting in the investigation of such a complaint will not be adversely affected in terms and conditions of academic standing, nor discriminated against, terminated, or dismissed because of the complaint. Note: Intentionally providing false information may be considered grounds for Program discipline.

“Retaliation” may include, but is not limited to, such conduct as:

- escalation of the original complaint behavior
- verbal harassment
- public comments about the incident
- unwarranted disciplinary action in or out of class
- unfair performance evaluations
- singling out the student for excessive enforcement
- a dismissal
- an unfair grade
- an unfavorable reference letter without cause

Relationship to Freedom of Expression

The MLS Program and the University of Minnesota are committed to the principles of free inquiry and free expression by both students and faculty. Vigorous discussion and debate are fundamental rights and this policy is not intended to stifle teaching methods or freedom of expression. Harassment and inequitable treatment, however, is neither legally protected expression nor the proper exercise of academic freedom; it compromises the integrity of institutions, the tradition of intellectual freedom and the trust placed in the institutions by their members.

Course Notes & Class Materials-Appropriate Student Use

The faculty of the University encourages students to take and share notes in their classes, laboratories, and the many other instructional settings in which they participate as they pursue their education at the University. Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. The faculty recognizes that collaborative note-sharing and discussion helps students learn.

However, the organization, preparation, and presentation of materials in a class or other instructional setting represent the intellectual effort of the instructor. Instructors have an interest in protecting this intellectual effort and in assuring the accuracy of any public representations of their course lectures and presentations. The classroom should also be a

place where instructors feel free to share with students the full range of information available in their subject areas, including results of new research as it is produced, without concern that such new knowledge will be shared prematurely outside the University learning community. Broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community.

1. Students may not distribute, via the Internet or other means, instructor-provided lecture notes or other instructor-provided materials, except to other members of the same class or with the express written consent of the instructor.
2. Instructors have the right to impose additional restrictions on course materials in accordance with copyright and intellectual property law and policy. (See Board of Regents Policy: [Copyright](#), Board of Regents Policy: [Commercialization of Intellectual Property Rights](#) and Administrative Policy: [Copyright Ownership](#).)
3. While students hold the copyright to their own notes from a course, students may not engage in the widespread distribution or sale of transcript-like notes or notes that are close to verbatim records of a lecture or class presentation. Students may share such notes with other students in the same class.
4. The provisions of this policy are enforceable as University rules under Board of Regents Policy: [Student Conduct Code](#).
5. If the faculty of a department or collegiate unit, as a group, or individual faculty in a particular course, have assented to or authorized the distribution of lecture notes or instructor-provided materials, such action does not violate this policy.

Conflict Resolution Center

The Student Conflict Resolution Center (SCRC) offers informal and formal conflict resolution services to resolve students' campus-based problems and concerns. An ombudsman provides confidential, neutral and informal options. An advocate is available to assist students in formal grievance or disciplinary proceedings. Detailed information about contacting the SCRC office or their services is available online at www.sos.umn.edu. (See also Student Concerns)

Cost of Attendance 2023-2024 Academic Year

MLS BS Degree & Certificate

Basic Costs

Resident status	Tuition/ Fees*	Books/ supplies	Room/ board	Transpo rtation	Personal/ misc.	Loan fees	Fall+ spring total
Resident living with parent	\$16,654.00	\$1,000.00	\$4,840	\$200.00	\$2,000.00	\$150.00	\$24,844.00
Resident living in dorm or apartment	\$16,654.00	\$1,000.00	\$13,028	\$200.00	\$2,000.00	\$150.00	\$33,032.00

Clinical Semester	\$7,951.00	\$1,000.00	\$6,817.00	\$114.00	\$1,000.00	\$150.00	\$17,032.00
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* Includes Students Services fees, Health Insurance, and Campus Transportation Fee

For the most up to date information, please go to OneStop

<https://onestop.umn.edu/finances/cost-attendance>

<https://onestop.umn.edu/finances/tuition>

<https://onestop.umn.edu/finances/fees>

Collegiate Fee

Fee	Assessed to
Academic Health Sciences	
\$185.00	All students, 6 or more credits (collegiate fee)
\$92.50	All students, fewer than 6 credits (collegiate fee)

MLS Course Laboratory Fees

Semester	Course	Purpose	Amount
Fall	MLSP 5112 Appl Diagn Microbiology Princ	Consumable Materials Access/Rent/Usage/Ownership	\$255.00 \$54.00
Fall	MLSP 5212 Appl Hematology & Hemostasis	Consumable Materials Access/Rent/Usage/Ownership	\$74.00 \$27.00
Spring	MLSP 5311 Laboratory Techniques	Consumable Materials Access/Rent/Usage/Ownership	\$242.00 \$27.00
Spring	MLSP 5312 Body Fluid Analysis	Consumable Materials? Access/Rent/Usage/Ownership	\$131.00 \$27.00
Spring	MLSP 5514 Appl of Transfusion Med Princ	Consumable Materials	\$192.00

Master of Medical Laboratory Science

Tuition

Enrollment	Resident	Non-Resident
Master of Medical Laboratory Science		
Per credit	\$765.00	\$765.00

Collegiate and Course Fees are the same for both Undergraduate and Graduate students in MLS

Counseling Services

Students have access to personal, career, learning and academic skills, and crisis counseling available on a short-term basis at Student Counseling Services on the Twin Cities campus.

To initiate counseling services call (612) 621-3323 to make an appointment. Download the appropriate forms at <http://counseling.umn.edu/> for the type of counseling you are seeking.

The MLS program hosts an embedded counselor, whose purpose is to provide short term counseling and referrals for students. When you are initiating counseling services please identify that you are a MLS student.

If you are unable to travel to U of M Twin Cities UCCS office for an appointment, the staff there is willing to work with you to schedule an online meeting or to make a referral to a local resource.

Credits – 12-Credit Minimum for Undergraduate/Certificate Students

Degree-seeking students at the Twin Cities Campus of the University of Minnesota are required to register for a minimum of 12 credits each Fall and Spring semester in order to be considered full-time students. Students whose life circumstances prevent them from being full-time are welcome at the University. Students in Year 3 may not need enough courses to make them full-time. Students who were delayed in Year 4 who need to repeat classes may need only 1-2 classes each term.

Dean's List

Students in the undergraduate Professional MLS Program are eligible for the Dean's List. The list is defined each semester and is determined using a minimum GPA of 3.666 or better for the semester. The student must be enrolled for at least 12 graded credits.

Disability Resource Center (DRC)

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have documented disability conditions (e.g., ADHD, Deaf & hard of hearing, learning disabilities, mental health, chronic health, autism spectrum, mobility and physical, brain injury) that may affect their ability to participate in activities or to meet course requirements. Students with disabilities are encouraged to contact Disability Resource Center to have a confidential discussion of their individual needs for accommodations or for assistance in determining whether they can meet the technical standards of the program with reasonable accommodations. Disability Resource Center is located in Suite 180 McNamara Alumni Center, 200 Oak Street. Staff can be reached by calling (612)626-1333 (voice or TTY).

The University of Minnesota and the MLS Program is committed to providing all eligible students equal access to learning opportunities. All circumstances related to a student's disability status or discussions around possible disability are kept confidential. Students are encouraged to talk to their academic advisor if they have any questions about how the program works with the Disability Resource Center to help support students. Many times the rigor of the MLS curriculum brings to light the need for additional support, where none might have been needed by students in the past.

DRC is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations. Students registered with DRC, who have a letter requesting accommodations, are encouraged to contact the program early in the semester. Disability accommodations cannot be applied retroactively. Students who have, or think they may have, a disability (e.g. psychiatric, attentional, learning, vision, hearing, physical, or systemic), are invited to contact Disability Resource Center for a confidential discussion at 612-

626-1333 (V/TTY) or drc@umn.edu. Additional information is available at the DRC website <https://disability.umn.edu/>

Each semester, students with documented disabilities and who are registered with the Disability Resource Center must provide a letter stating the requested accommodations to the Program Director for review. An accommodation is a modification that is made to a course, program, service, job, activity, or facility that eliminates or minimizes disability-related barriers to allow equitable access.

The program director in collaboration with the course directors will determine whether the accommodations requested are attainable while maintaining the requirements of the MLS Program. The MLS program is NOT able to provide accommodations in a course without documentation from DRC.

An MLS student, who is receiving accommodations within their MLS courses, should seek additional consultation with the Disability Resource Center if they feel that their current accommodations are not sufficient to help them meet the program requirements. They should also consult with the access consultants in the DRC if they believe that different accommodations may be needed.

Cautionary Note: Due to the performance skills and abilities required for successful completion of the MLS program, not all accommodations are possible. Students must be able to individually meet the Technical Standards and course/program outcomes (competencies) as described in the application form and/or Student Handbook.

There is often more than one way to accommodate a situation or activity. In order for an accommodation to be considered reasonable, however, it must meet four criteria:

- It must not compromise essential requirements of a course, program, job, activity, or facility.
- It must not cause an undue administrative or financial hardship.
- It must not compromise safety of the student, patients, or others.
- It must not fundamentally alter a course or program.

Equal Opportunity and Affirmative Action

The Office of Equal Opportunity and Affirmative Action (EOAA) at the University of Minnesota Twin Cities is a place for all employees and students to file reports and complaints of discrimination behavior, as well as receive consultation and get assistance with problem-solving concerns related to discrimination. EOAA will also work to avoid and resolve conflicts of interest from nepotism and personal relationships. Information on all of these topics is found on the EOAA web site at <https://eot.umn.edu/>.

Financial Aid

Families can apply for financial aid from the University of Minnesota using the Free Application for Federal Student Aid (FAFSA). One application is all it takes to be considered for aid at the U of M and at any other schools you are considering. We strongly encourage every family to submit the FAFSA, even if they think they may not be eligible for aid. Regardless of your income

level, the best resources for financial aid (University, state and federal aid) are only available through the FAFSA.

The University of Minnesota uses the FAFSA to determine your eligibility for federal, state, and University aid programs. A financial aid package might include grants, loans, scholarships, and/or work study. **We encourage you to submit the FAFSA as soon as possible after it becomes available on October 1st of your senior year of high school or the year prior to transferring to UMN.**

The FAFSA, available in both English and Spanish, is available [online](#). Be sure to release your information to the University of Minnesota Twin Cities by including the U of M Federal School Code of **003969**.

FAFSA (Free Application for Federal Student Aid)

FAFSA on the Web: <https://studentaid.gov/h/apply-for-aid/afsa>

You may apply for aid before you receive an admission decision from the University of Minnesota. However, you won't learn what aid you've been awarded until you have been admitted.

A number of scholarships are also available for MLS students during their professional year. For instructions on how to apply and a list of available scholarships please visit:

<https://www.alliedhealth.umn.edu/mls/degrees-programs/scholarships>

Financial Aid Holds - Satisfactory Academic Progress (SAP)

It is not uncommon for MLS students to have a hold placed on their financial aid due to exceeding timeframe while in a second undergraduate or dual degree program or as a result of changing their major. MLS students have often earned a large number of credits, either because it took them some time to be admitted to the U of M and MLS, or because they are seeking MLS as a second degree or major. In these cases, students should contact the academic advisor for an appointment to fill out a [SAP Appeal](#) form found under the Financial aid and loans tab. Your advisor will note whether or not you are making good progress toward your degree to support your request for continuing aid.

Grading Policy in the MLS Program

Each course in the MLS Program will provide you with a syllabus describing the course activities, assignment, quizzes, and exams that contribute to the final course grade. Because this is a medical and professional curriculum, MLS program courses may be quite different than previous courses you've taken. To successfully complete a MLSP laboratory course, students must meet final performance competencies for that course regardless of other points earned.

What does this mean? Why do we have this policy?

The MLS program is not just a degree program at the University; it is also a credentialing degree in a medical profession. Graduates of this accredited medical laboratory program must meet required performance standards and be able to perform medical laboratory testing on patients efficiently and with absolute accuracy. Patient's lives are at stake. Therefore to pass each laboratory course, the final proficiency exam must also be passed. Standards will be clearly described in each course for the expectations of performance competency. Each course is

designed to provide students with sufficient guidance and practice to meet the required competencies. These performance standards are aligned with the professional expectation of NAACLS and of the employers. To demonstrate competency is to show the ability to perform, interpret and apply knowledge accurately, efficiently, and consistently.

Students must also comply with the Affective Domain competencies each semester to continue enrollment. These professional standards of behavior and interaction are required in the workplace and therefore must be developed while in the educational program. If you have any questions please contact the individual course directors for information.

How are grading scales applied?

One of the key differences about the courses in our program is that we do not use a curve of grades. Because we are a competency-based curriculum and because we are a medical curriculum, students must meet required competencies to pass each course. We therefore do not provide “extra credit, second chances, or make-ups” for missed course requirements. Instructors have determined the minimum competencies required for each of the MLS course based on the NAACLS Standards, the ASCLS Entry Level Competencies, and the content of the ASCP Board of Certification Exam.

Assignments, quizzes, and other activities must be completed according to the parameters of the course; late assignments typically are still required but may receive zero points. Each course will describe how missed requirements will be managed. It is important that students understand the rigorous demands of the MLS program and know that you may need to adjust your traditional study habits to be successful.

Although difficult to do in a typical grade-based college environment, we would like to discourage you from focusing on the points earned on an assignment or exam and instead consider whether you have truly learned the information. Many times students want to negotiate with faculty for a few points here and a few points there thinking that this will allow them to pass the course. If you focus on mastering the information, your performance on the course activities will demonstrate your abilities. If you have questions, please contact your faculty or academic advisor.

Grades & Uniform Grading Policy

The University of Minnesota Uniform Grading Policy can be found at both onestop.umn.edu and in the UWide Policy Library at <https://policy.umn.edu/education/gradingtranscripts>.

To continue enrollment as student in the MLS Program are expected to receive at least a grade of C in ALL courses taken. Less than C (C-, D, F) grades are not accepted for progress in the major.

Incomplete (I) Grade

An incomplete grade is permitted only in cases of exceptional circumstances (typically outside of the student’s control) and following consultation with the instructor. Incomplete grades are not given to prevent a failing grade in a course. In such cases an “I” grade will require a specific written agreement between the instructor and the student specifying the time and manner in which the student will complete the course requirements. An “I” grade

received in a MLSP course is expected to be completed by the end of the following semester. If this is not fulfilled, the grade reverts to an F.

Unsatisfactory (N) Grades

While in the professional program, probationary status may be assigned when a student receives a grade less than C or when a student has an overall GPA in the professional program of less than 2.0. MLS calculates an N grade as an F. For example, a 4 credit course with an N receives no grade points but is calculated as 0 in total GPA, e.g. A=4, B=3, C=2, D=1, N=0, F=0. If the course is repeated and a C grade earned, 4 credits (of C) are used to calculate the GPA.

Grade Accountability

The University of Minnesota Grading Accountability Policy is listed below, and can also be found in the UWide Policy Library at

<http://www.policy.umn.edu/Policies/Education/Education/GRADEACCOUNT.html>

By the start of the term, every department must identify, for each course offering, the instructor responsible for the course.

Instructor responsibility

- a. The instructor who is in overall charge of a course offering is accountable for all grades given to students. Responsibility for grading or evaluating student work in a course may be assigned to a teaching assistant or grader but ultimate responsibility remains with the instructor for the course. All individuals who grade or evaluate student work in a course must have a formal affiliation with the course (e.g., as instructor of record, teaching assistant, paid grader).
- b. Instructors in charge of a course with multiple sections or laboratories must take reasonable steps to ensure that grading across sections or laboratories is consistent.
- c. In courses where the instructor in charge of a course is an adjunct faculty member who may be affiliated with the University for only a short period of time, the department or academic unit may assign a regular faculty member to be accountable for grades after the course has ended.
- d. Students in every course must be clearly informed about who is ultimately responsible for assigning grades in the course.

Student questions about grades

- e. Students have the right to request and receive an explanation for a grade during and after the course **but have no right to challenge the academic merits of any grade.**
- f. Students may seek an explanation for a grade **until the end of the following semester** (not including summer session). The instructor is obligated to provide an explanation for a grade within a reasonable time if a request is made by the end of the following semester. **The instructor is not obligated to reconsider the grade.**

If a student does not receive an explanation for a grade from the instructor within a reasonable time of making a request, he or she may consult the Program Director for assistance in obtaining an explanation. Students also may seek assistance from the MLS Student Services Coordinator.

Graduation and Degrees with Distinction – Undergraduate Students

The minimum requirements for graduation from the University of Minnesota are completion of the curriculum requirements and a total of 120 credits (baccalaureate degree) with an average of 2.00 grade points. Upon satisfactory completion of the prescribed course of study, the Bachelor of Science degree will be conferred by the Board of Regents. Students with a cumulative grade point average of 3.75 or higher may graduate “with distinction,” those with a cumulative grade point average of 3.90 or higher may graduate “with high distinction.” To qualify for either a degree with distinction or a degree with honors, a student must have completed 60 or more semester credits at the University. Only University course work shall be counted.

Health Center – Boynton

Conveniently located in the heart of the East Bank, the East Bank Clinic is Boynton’s largest and main clinic facility on the Twin Cities campus. Boynton’s East Bank Clinic is one of the most comprehensive postsecondary health services in the nation. With a staff of over 200, the East Bank Clinic houses several individual clinics including Dental, Eye, Massage Therapy, Mental Health, Nutrition, Physical Therapy, Primary Care, Women’s, Travel Immunization, and Urgent Care. The East Bank Clinic is also home to a full-service Pharmacy and offers health and wellness services.

Boynton’s East Bank Clinic staff includes licensed and certified physicians, physician assistants, nurse practitioners, registered nurses, licensed practical nurses, certified medical assistants, optometrists, dentists, dental hygienists, mental health care providers (including psychiatrists, psychologists, and social workers), physical and massage therapists, registered dietitians, and pharmacists.

All University of Minnesota Twin Cities Campus students, faculty, and staff are welcome. Most services are no out-of-pocket cost for full-time, degree-seeking students. Call to make an appointment for almost any health concern, or walk-in to the [Gopher Quick Clinic](#) located at our East Bank Clinic for a minor acute condition.

Minnesota English Language Program

The Minnesota English Language Program (MELP) at UMN provides English as a Second Language (ESL) courses designed to help non-native speakers improve their reading, writing, listening, and speaking skills. These credit or noncredit courses are designed for beginners to advanced English speakers.

MELP also provides in-person evaluations and assistance by appointment. Go to <https://ccaps.umn.edu/minnesota-english-language-program> for more information.

Personal Electronic Devices in the Classroom

Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom.

1. MLS instructors may restrict or prohibit the use of personal electronic devices in their classroom, laboratory or any other instructional setting. An instructor may allow students to use laptops or other devices for taking notes or class work. **Electronic devices are strictly prohibited in the MLS teaching laboratories due to biosafety restrictions.**
2. Individual students will be directed to turn off personal electronic devices if the devices are not being used for class purposes. If the student does not comply, the student may be asked to leave the classroom.
3. In establishing restrictions, instructors must make reasonable accommodations for students with disabilities in working with the Office for Disabilities Services.
4. The default provision is that students are not permitted to record (whether audio or visual or both) any part of a class/lab/other session unless explicitly granted permission to do so by the instructor.
5. Students who fail to comply with an instructor's restrictions or prohibition will: a) be subject to the provisions of Board of Regents Policy: [Student Conduct Code](#); b) may be asked to leave the class; and c) if disruptive to the class or the behavior is repetitive may face probation and/or dismissal from the MLS Program.

Reference Requests

Students and alumni of the Medical Laboratory Sciences Program must submit a Reference Request and Authorization form prior to release of any information to employers, educational institutions, or organizations that provide awards or scholarships. Reference Requests should be submitted to Student Services for processing. Information will not be released without Reference Request on file.

Service Work

During clinical experience courses students may not be used by clinical sites for service work. Students are not to be used to augment affiliate staffing to perform patient work. Their time in the clinical experience courses is to be used for learning and achievement of clinical experience courses objectives. If students are willing, they may work for the clinical affiliate site outside of the clinical experience assignment time, but this work must be voluntary and must be paid at the current rate for the position.

Sexual Harassment and Discrimination

The University has strong policies against sexual harassment and discrimination in any form. If you feel you are the victim of either, please contact your academic advisor, the Director of Student Services, the Program Director and/or the Office of Equal Opportunity and Affirmative Action (612-624-9547).

Students are responsible for knowing the University of Minnesota, Board of Regents' policy on Student Conduct and Sexual Harassment found at <http://www.umn.edu/regents/polindex.html>.

Students are expected to be attentive during class, ask questions if he or she does not understand something, and participate in class discussions. Students are also expected to listen respectfully to other students and the instructor when speaking. Racism, sexism, homophobia, classism, ageism, and other forms of bigotry are inappropriate to express in the classroom.

Snow & Inclement Weather Policy

When WCCO radio announces the University of Minnesota Twin Cities is closed due to a snow emergency or other emergencies, courses are cancelled. You may also check the UMN home page for weather updates.

In the case of clinical rotations, any student on a MLS clinical rotation is not required to attend if the Twin Cities campus is closed due to a snow emergency. Clinical rotation instructors and supervisors have been informed of this policy. Students should call the clinical instructor to communicate the cancellation as soon as possible after the announcement has been made.

Social Media Policy for AHS Students

This policy provides guidance and parameters for social media usage by students enrolled in Academic Health Sciences educational programs. While social media tools are a very popular mode of engagement and communication and facilitate education, collaboration, research, business, and remote work, it's usage by AHS students presents unique risks to clients/patients. Because of the risks associated with inappropriate use of social media, misuse must be addressed through professionalism training, usage guidelines, and appropriate corrective and disciplinary action when warranted. The use of social media requires a conscious recognition of the profoundly public and long- lasting nature of on-line communication which provides a permanent record of postings. Each student, resident and fellow is responsible for appropriate online behavior just as they are with communications in other areas of their professional life.

<https://drive.google.com/file/d/1UGoeZzXV-WRjZ3tVNilei5fk8PpRNOOq/view>

Student Organizations & Community

MLS Facebook Page

Students have expressed a desire to have virtual opportunities to connect with other MLS students, especially in Year 3 when they have different class schedules. The MLS Program is providing a Facebook page so that students can start building community, study groups, and take part in activities that strengthen both academic and professional ties to the department. There are 2 Facebook groups you may want to join: ASCLS-MN Student Members and the New Medical Laboratory Scientist. Both have members from all over and from multiple class groups.

<https://www.facebook.com/groups/ASCLSMNStudent/>

or <https://www.facebook.com/groups/medical.laboratory.professionals/>

Medical Laboratory Sciences (MLS) Student Council

The purpose of the MLS Student Council is to represent the students in various activities throughout the year; to promote student-faculty relationships, provide student input to the program and stimulate social and educational activities. A faculty advisor supports the student council in an advisory capacity. Elections are held each year during the first week of October for student representatives.

Council for Health Interdisciplinary Participation - CHIP

Students in Medical Laboratory Sciences are also eligible to participate in the activities of the Council of Health Interdisciplinary Participation (CHIP) within the Academic Health Center and other University student organizations. All students in the Academic Health Center are

members of CHIP. The organization publishes a newsletter, sponsors seminars, programs, and parties, and is involved in community service, education, and health care delivery. An Interprofessional Student lounge is located on the 7th floor of the Health Science Education Center (HSEC) (612)625-7100. You can find out more information at the following web site: <https://www.chip.umn.edu/>

Student Membership in the Professional Societies

Students in the Medical Laboratory Sciences program are eligible for student membership in the American Society for Clinical Laboratory Science (ASCLS) and several other professional organizations. Students admitted into the MLS Program are provided with student membership to ASCLS while enrolled.

Students are encouraged to continue membership when they graduate as part of their transition to a laboratory professional. Benefits of ASCLS membership include: the CLS journal, ASCLS Today Newsletter, placement service, seminars, and participation in national, state, and local meetings. Indirect benefits include communications with other professionals (networking), job information, regulatory compliance, and educational enhancement opportunities. These organizations sponsor scholarships as another benefit of membership. You can find out more information at the following web site: <http://www.ascls.org/>

Student Record Access

Federal law, state law and Regents' policy govern access to student records. Violation of Regents' policy may result in disciplinary action. This is a brief summary of information that may, or may not, be released without the student's consent. For further information see the web site at <https://onestop.umn.edu/terms-and-conditions/student-records-privacy>

Directory Information

The following information is public information, unless the student has requested non-disclosure (suppress). Students may suppress (1) address, e-mail and phone information or (2) all information. On the PeopleSoft system, the “window shade” icon indicates that a student has suppressed his or her information.

A request to have information suppressed or a release of suppression must be submitted to the Office of the Registrar while an individual is an active student.

- Name, Address, Electronic (E-mail) address, Telephone number
- Dates of enrollment, Enrollment status (full/part time, not enrolled)
- Major, Advisor, College, Class
- Academic awards and honors
- Degree received

Non-Public (Private) Information - Information other than the aforementioned directory information is not public and may not be released except under certain prescribed conditions.

Non-public information includes but is not limited to:

- ID and social security numbers, Birth date, Gender
- Grades, Courses taken, Class Schedule
- Test scores, Advising records, Educational services received

- Disciplinary actions, Photographs

Please note – all students in the MLS program must provide contact information to the program but may suppress this information in the general directory. The MLS program must have current contact information and emergency contact information due to the nature of the laboratory and clinical courses. Students must ensure that their contact information is complete and up to date.

Note: Information may be released within the University on a need-to-know basis. Thus advisors may see the transcripts of their advisees. Scholastic committee members may review academic progress of students within their college. However, looking at the record of a student in another unit is not permitted. Student ID number, Social Security number, race, and date of birth are not public information.

Students Managing Their Educational Records

Students should take responsibility for their educational records. For complete details and guidance visit the UWide Policy Library at <https://policy.umn.edu/education/studentrecords-proc05>.

Tuition Rates and Policies

MLS students pay the undergraduate or graduate tuition rates plus requisite fees. Tuition and fee rates are available at: <https://onestop.umn.edu/finances/costs/cost-attendance>. See Also Cost of Attendance

Writing and Academic Support

The University Center for Writing on the Twin Cities campus provides writing assistance in a variety of ways. Please visit: <http://writing.umn.edu/sws/> for more information.