Prospective Student Guide

Medical Laboratory Sciences Program

# MLS Mission Statement

The mission of the Medical Laboratory Sciences Program at Northern Illinois University is to prepare medical laboratory scientists with knowledge, skills and professional attitudes that are required for fulfillment of future leadership roles in the health care team. The program faculty is committed to contributing to the knowledge base in medical laboratory sciences by research, publication, and service. Program goals align with School of Health Studies and NIU baccalaureate goals.

## I. Program Goals

* Provide MLS students with knowledge and competencies needed to meet entry level requirements for the profession
* Provide MLS students with opportunities to engage in learning experiences in both an academic and clinical environment
* Prepare MLS students with information and desire for continuous learning

## II. MLS Learning Objectives

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| Learning objectives for the Program: Graduates of the MLS program will be prepared for successful careers in the Medical Laboratory or  related areas of further study by demonstrating: |
| * Specific knowledge of theory underlying laboratory testing and disease correlation using analytical, interpretative, and critical thinking skills consistent with entry-level medical laboratory science practice. * Appropriate techniques for laboratory procedures from simple to complex including pre-analytical, analytical, and post-analytical interpretation including appropriate operation and maintenance of sophisticated biomedical instrumentation * Compliance with all laboratory regulations, confidentiality and quality assurance practices using professional and ethical behaviors when working as a member of a diverse health care team. * Effective written and oral communication in a variety of styles to varying audiences including teaching in health professions. * Basic knowledge and application of laboratory management skills and research skills. |

## III. MLS Program Competencies

### A. Cognitive Skills

* Demonstrates skills consistent with entry-level practice after normal instruction and study.
* Demonstrates the ability to read and understand written procedures by following the printed instructions.
* Demonstrates knowledge of theory underlying laboratory testing utilizing analytical, interpretive, and problem-solving skills.
* Reports test results accurately; conforms to established reporting policies and procedures.
* Evaluate results of patient sample analyses by using calibration and quality control data.
* Describe quality control procedures and determine if shifts or trends have occurred by analyzing quality control data. Explain the difference between shifts and trends to non-laboratory professionals (physicians, nurses, administrators).
* Notifies appropriate supervisor of all critical or unusual test values and appropriately refers unresolved problems.
* Takes appropriate problem-solving measures when quality control results or patient sample analyses are unacceptable.
* Demonstrate critical thinking skills through problem solving and demonstrates resourcefulness to make appropriate decisions after analysis of available data.
* Transfers information and/or experiences from one situation to another.
* Demonstrates awareness of test reference values and correlates test results with other patient data.
* Identify resources that are available to help answer questions or troubleshoot laboratory analyses.

### B. Psychomotor Skills

* Complies with all institutional safety policies
* Confirms identity of patient and/or specimen and determines when a specimen is unacceptable for analysis; takes appropriate steps.
* Performs analytic procedures from simple to complex, following laboratory protocols.
* Document and interpret quality control results. Take appropriate problem-solving measures when quality control results or patient sample analyses are unacceptable.
* Determine specimen acceptability for analysis.
* Verifies abnormal results before reporting.
* Operate laboratory equipment safely using accurate techniques.
* Given appropriate orientation to biomedical instrumentation, perform preventive maintenance on instruments. Understand the reasons why preventive maintenance is necessary and explain those reasons to non-laboratory professionals (physicians, nurses, administrators).
* Completes all assigned duties in a timeframe considered acceptable to the supervisor.
* Organizes workflow in an efficient manner and can respond to a “crisis” situation to be productive under a moderate level of stress.
* Complies with regulations for workstation cleaning on campus and in the clinical environment.

### C. Professional Behavior Skills

* Arrive on the NIU campus and at the clinical site ready to work at or before starting time.
* Establishes cooperative and respectful relationships with instructors, students, and clinical site personnel
* Appears professional in dress, grooming and conduct
* Prepare for clinical and classroom activities by reviewing lecture, laboratory and textbook materials prior to presentations and laboratory exercises.
* Complete all assigned duties in a timeframe considered acceptable to the supervisor.
* Displays confidence after appropriate instruction but seeks help when needed; recognizes limitations.
* Accept responsibility for work. Accept consequences for mistakes as well as accolades for successes.
* Listen to constructive criticism and accept it to improve.
* Admit errors and take corrective actions as soon as possible, making sure that the appropriate people are notified.
* Maintain patient and institutional confidentiality.
* Perform all laboratory procedures applying high standards of quality and professionalism. Take measures to ensure that work is as accurate as possible.
* Willingly aids others and accomplish tasks as a team.

### D. Communication Skills

* Communicates effectively in both oral and written English with other healthcare professionals as needed.
* Absences are minimal and justified; gives proper notification in case of absence.
* Maintain weekly communication with faculty and instructors.
* Maintain positive interactions with peers. Courteous, respectful, and collaborative interactions are valued. Work effectively on group projects.
* Prepare clear and accurate laboratory reports, using whatever medium the position entails (computer entry, written narrative, telephone messages), that give data about patient samples.
* Using appropriate grammar and spelling, prepare written assignments, which may include topic papers, research proposals, presentations, and procedures.
* Interact cooperatively, respectfully, and truthfully with faculty, supervisors, and other non-laboratory medical professionals (including physicians, nurses, etc.)
* Maintain professional and caring behaviors when interacting with patients, visitors, and other non-professional staff members.

### E. Management/Education/ Research Competencies

* Demonstrate comprehension of learning domains by writing instructional objectives for each domain. Write instructional objectives for recall, application and problem solving.
* Write appropriate test questions using learning domains and level of difficulty for an instructional session.
* Teach a co-worker analytical technique including instrument calibration, preventive maintenance strategies, and sample testing.
* As a potential laboratory manager, understand how to write useful job descriptions, evaluate resumes objectively, and interview potential employees selecting qualified candidates for hire as clinical laboratory scientists.
* Evaluate fiscal trends and monitor expenditures compared to budget, to provide sound fiscal management of laboratory resources.
* As a potential laboratory manager, learn how to motivate laboratory staff by creating equitable work schedules, completing staff performance evaluations, and communicating the strengths and weaknesses of work performance to staff in a constructive manner.
* Demonstrate the ability to identify and apply basic elements of research inquiry in clinical laboratory sciences and in health and human sciences and be able to describe the nature, significance, and characteristics of research in health and human sciences.
* Identify the steps involved in the research process.
* Identify independent, dependent, and controlled variables in research studies.
* Identify, describe, compare, and contrast basic methodologies used in clinical laboratory sciences and in health and human sciences research studies.
* Discuss sampling techniques and select appropriate applications for different research questions in clinical laboratory sciences and in health and human sciences research studies.
* Identify statistical concepts and their applications to the analysis of research data.
* Develop and present a research proposal.

## IV. Essential Functions Laboratory Expectations

The MLS laboratory courses provide an opportunity for students to learn and practice laboratory techniques in a nonthreatening environment. Demonstration of necessary skill development is required before going to the clinical practicum at the hospital laboratory. Instructor will observe student performance during lab and assess students using the following criteria.

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| Essentials for student laboratory success |
| * Arrived in time for instructions |
| * Earned at least 70% on prelab quiz |
| * Prepared for Lab activity for the day with necessary documents |
| * Follow steps in procedures to obtain results |
| * Seek help when needed |
| * Able to perform lab work alone or in a pair/team |
| * Interprets results to determine accuracy |

## V. Academic Conduct/Dismissal Policies

### A. Classroom Expectations

Students in the Medical Laboratory Sciences Program have the responsibility to foster the

profession and act professionally. To do so, individual behavior must be ethical including

conduct in personal and academic affairs. In pursuing this objective, the student shall:

1. **Demonstrate respectful and courteous behavior in the classroom and**

**laboratory.** (disruptive or disrespectful behavior in the classroom/lab will not be

tolerated) Treat peers, faculty, supervisors, co-workers, patients, and the public with

respect and tolerance for personal differences. Respect and protect the rights,

privileges, and beliefs of others. Students that causedisruption/distraction in the

classroom or in the lab as determined by the instructor and program director, may be

asked to withdraw from the course and possibly from the program.

2. **Maintain good academic standing and** abide by procedures, rules, and regulation

as described in the NIU catalog and MLS Student Handbook.

3. **Abide by the guidelines** prescribed by each professor in the preparation of

academic assignments and other course requirements.

4. **Be objective and honest** in academic performance and relationships.

5. **Strive toward academic excellence**, improvement of professional skills, and

expansion of professional knowledge.

6. **Neither engage** in, assist in, nor condone cheating, plagiarism, or other such

activities.

### B. Attendance Classroom/Lab

Attendance is required for each class and lab to be successful in this program. Excessive

tardiness and absences will not be permitted.

1. **Tardiness:**

Tardiness is defined as being more than 5 minutes late for the start of the lecture or

laboratory. The student must communicate a valid reason for being tardy to the instructor

prior to or within 30 minutes of end of class.

2. **Absences:**

For every unexcused absence 5 points will be deducted from the student’s overall points.

Points lost due to tardiness and unexcused absences may result in a lowered grade in the

course. If the number of tardies or absences become excessive, the student may be

dismissed from the program for nonacademic reasons.

### C. Professional Behavior at the Clinical Site

During the time students are at a clinical site, they are bound by rules of conduct that may

differ from the NIU code of conduct. Since students are dealing with patients in a

professional capacity, they are expected to adhere to all HIPAA regulations and

professional codes of conduct. **Failure to do so may result in dismissal from the**

**program.**

### D. Attendance during clinical year

1. Students MUST arrive no later than the designated time on Mondays. If students

are going to be late to class they must notify the faculty/staff. If the student is late or

absent to a synchronous online session because of poor or no internet connection, the

student will contact faculty when internet connection is available regarding missed

announcements and will meet assignment and exam deadlines as designated. If the

student is late or absent due to another reason, the student is responsible for emailing

the faculty/staff. The missed work may be completed at the discretion of NIU

faculty/staff. If missed work is not completed for any reason, this could result in a

lowered grade.

2. Students MUST notify the clinical site coordinator and NIU’s clinical education

coordinator if they will be absent or late **Tuesday through Thursday**. Clinical sites

will individually determine penalties.

3. Absences include sick days, personal business (including job interviews and other),

religious holidays, etc. A *Student Absence Report Form* will be completed by the

clinical instructor/supervisor and recorded. It is the student’s responsibility to

schedule make up time with the instructor/supervisor.

### E. Academic Standing

Students in the MLS Program are expected to abide by University Student Conduct Code.

Information related to this can be found at:

<http://www.niu.edu/conduct/student-code-of-conduct/index.shtml>

### F. Good Standing

Students who maintain a cumulative GPA of 2.0 in the 1st year and 2nd year MLS courses

and who complete all examinations and assignments will be considered in good

academic standing in the Program, providing that professional behaviors meet the

standards acceptable to NIU and clinical faculty.

### G. Program Probation

The MLS Program follows University academic probation cumulative GPA requirements.

MLS faculty will jointly determine a course of action if needed.

### H. Program Dismissal

Students may be dismissed from the program for either academic or nonacademic

reasons. Guidelines for the University policies can be found online in the undergraduate

catalog under Academic Regulations, subtitle Academic Probation and Dismissal.

<http://catalog.niu.edu>

1. **Academic Dismissal**: A student may be dismissed from the program if the

student has failed to meet either the cognitive, psychomotor, or affective standard

competencies of the program. A student who does not meet expectations during a

clinical rotation as part of the practicum may be allowed to spend extended time

in that rotation depending upon resources available through the clinical site. This

may delay graduation.

2. **Non-academic/Disciplinary Dismissal**: A student also may be dismissed from the

program for nonacademic reasons such as failure to maintain mental, ethical, and

physical standards consistent with those of the profession of Medical Laboratory

Science. Students failing to perform laboratory functions to meet standards required

by the accrediting agency may be dismissed from the program. A student who has

violated university or clinical affiliate institutional rules governing conduct, which

include but are not limited to cheating, stealing, falsifying records, abuse of patient

confidentiality, disruptive behavior, drug abuse, or drunkenness, may be dismissed

from the program. A student acting in such a way as to threaten the safety of patients,

classmates, faculty, or others is a reason for nonacademic dismissal. Dismissal for

nonacademic reasons can occur anytime during the curriculum. If one of the above

incidences with a student has been identified, the MLS Program Coordinator, School

of Health Studies Department Chair and College of Health and Human Sciences

Administrator will meet with the student to discuss university options and develop a

course of action.

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### I. Leave of Absence

Students who request a Leave of Absence from the Medical Laboratory Sciences

Program must submit a signed letter requesting a leave.

### J. Withdrawal from the Program

If necessary, a student may withdraw from the program after the Program Coordinator

has been contacted. The student must submit a written letter documenting his/her

request for withdrawal.

### K. Withdrawal Due to Military Responsibilities

All feasible consideration will be exercised for students who are required to withdraw

from classes and/or the program because of military service responsibilities. In these

cases, the student should discuss options with the Program Coordinator in a timely

manner.

## VI. Teach Out Plan in the event of program closure/clinical site unavailability

### A. Program closure:

Northern Illinois University is committed to student success. If students

are not able to continue the program because of an unforeseen closure, adjustments for

students will be made to assure graduation. Since the program is organized as 2+2, if the

closure was to occur during the students’ first year in the program, those students would

be directed to alternative MLS programs or to completion of the general B.S. in Health

Sciences.

### B. Clinical Site Unavailability:

A committee consisting of university and affiliate representatives makes placement

decisions. WE CANNOT GUARANTEE THAT YOU WILL BE PLACED AT ONE OF

YOUR THREE PREFERENCES. However, every effort will be made to successfully

place all eligible students. We do not admit more students than we can place at clinical

sites. In the case of unprecedented circumstances where the clinical site is no longer

available and the student(s) cannot attend this assigned clinical site, the student may be

placed at another site or given alternative clinical exercises by faculty to meet learning

objectives of the practicum experience.

## VII. MLS student complaint/grievances and resolutions

The MLS Program at NIU attempts to make all students feel that they have been treated

fairly and given an opportunity to discuss his/her problems. If a student has an issue with a

course or instructor that cannot be resolved through discussion with the instructor

or Program Coordinator, a Grievance Form can be submitted.

### A. Clinical Setting

In the clinical setting the student should make every effort to resolve problems with the

rotation supervisor or instructor. If this is not possible, the student should contact the clinical

affiliate liaison who can work on resolving the issue with the clinical education coordinator

and/or program coordinator if necessary.

**Procedure for resolving problems:**

Step 1: Discuss problem with course instructor or clinical supervisor

Step 2: Discuss problem with MLS Clinical Education Coordinator or Program Coordinator

Step 3: Submit a written complaint using form provided. If the problem cannot be resolved at

the Program level, a request for assistance may be made to the department chair and/or

college dean.

### B. Grade Appeals Process

Students appealing grades must use the following process:

1. Contact course instructor and try to achieve accommodation. Should that fail, proceed with the second step.
2. Talk with department chair. If still unsatisfied, proceed with the third step.
3. Draft letter to department chair asking for a review of the grade by the Grade Appeals Board (GAB). Contact the Ombudsman for procedures for drafting the letter. If unsatisfied after the decision is made by the GAB, proceed with the fourth step.
4. Write a letter to the Dean of the College asking for a review of the GAB procedures.

## VIII. Policy for Service Work during The Clinical Experience

Students are not required to provide service work on campus or at the clinical sites. The clinical experience is strictly for educational purposes and there is no expectation of service provided to the clinical affiliate. The affiliation agreement states that “nothing herein shall be deemed to create an employer-employee relationship,” and clinical affiliates do not “substitute” students for employed staff. Students are informed about the program’s policy regarding required service provision to clinical affiliates and are instructed to discuss with the program coordinator any concerns they may have about affiliate site expectations. Some students are offered paid part-time positions at their respective clinical sites. Students who work for pay at their respective clinical sites must be scheduled for hours that do not conflict with their rotation or on-campus classroom schedules and while working are exclusively supervised by clinical site staff. Students who wish to engage in service activities may volunteer, but the service must be performed during the student’s free time.