

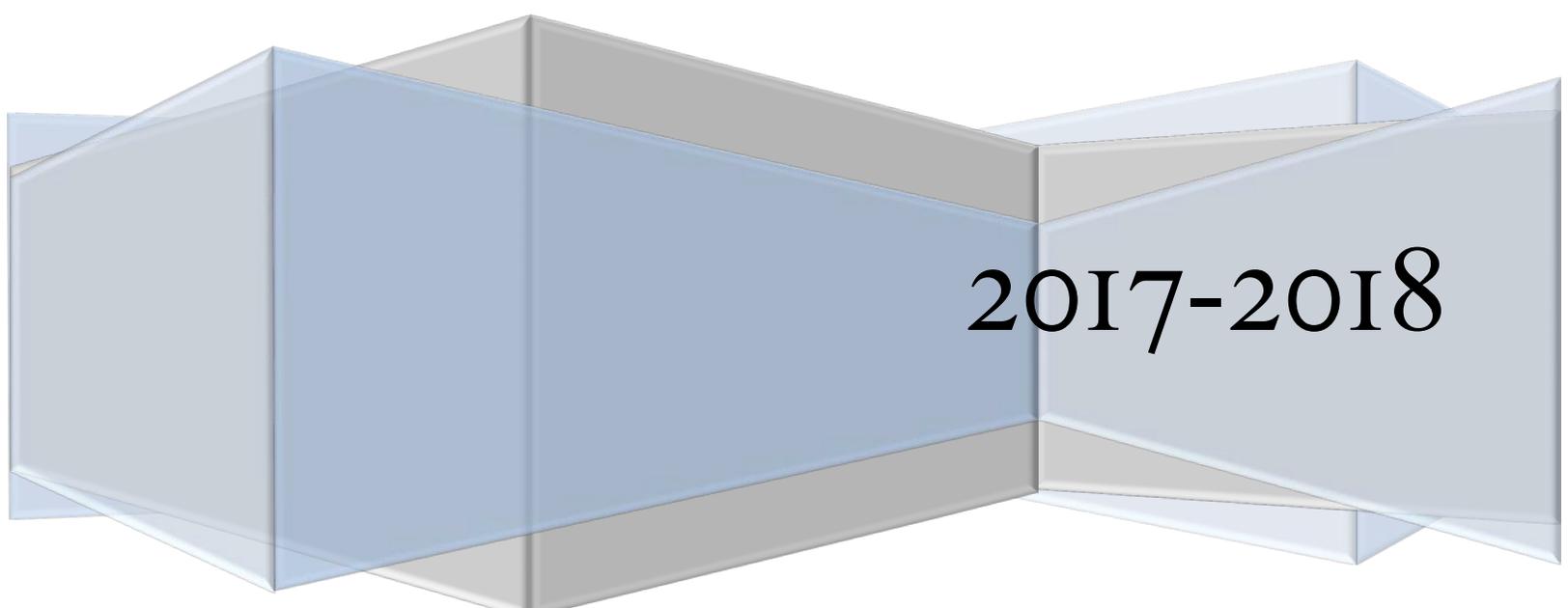
**NORTH HENNEPIN COMMUNITY COLLEGE**

# **MLT PROGRAM**

## **STUDENT POLICY MANUAL**

**For disability accommodations call 763-493-0555  
Minnesota Relay users may call 1-800-627-3529**

**DISCLAIMER:** This handbook is not intended to form a contract and these materials are subject to change at any time.



**2017-2018**

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## **North Hennepin Community College**

Member of the Minnesota State Colleges and Universities (MnSCU) System

### **Mission Statement**

*Engaging Students, Changing Lives*

North Hennepin Community College creates opportunities for students to reach their academic goals, succeed in their chosen professions, and make a difference in the world.

### **Vision Statement**

*Opportunity Without Limits, Learning Without End, and Achievement Beyond Expectation*

### **Guiding Values**

We believe the power of education to change lives.

Toward that end, we:

- Inspire intellectual curiosity
- Embrace diversity of all kinds
- Foster trust and respect
- Expect quality and continuous improvement
- Encourage creativity and innovation
- Promote individual responsibility and integrity
- Invest in professional and personal development
- Build strong, collaborative partnerships
- Serve as responsible stewards of college resources

### **Strategic Goals**

The following strategic goals give direction for moving North Hennepin Community College forward:

#### **Access, Opportunity, and Success**

Maintain academic standards and stable enrollments while increasing retention and completion

#### **Innovation and Relevance**

Maintain curriculum that is relevant and effective while developing innovative new courses and programs

#### **Culture of Commitment**

Develop a more rewarding, engaged and inclusive college environment

#### **Workforce and Community**

Expand effective partnerships within and beyond our community

## **Commitment to Quality**

North Hennepin Community College will provide services and learning opportunities (course, programs, student life activities, workshops, and other ways of engaging learning) that will be of highest quality and value (relevance). We will also provide the resources needed for success and demonstrate honesty and integrity in all of our communications and interactions, while being respectful of each other and what we bring to the college. Each person at NHCC has a responsibility to uphold this commitment.

## **College Commitments**

- Develop policies to ensure the success of this commitment
- Provide resources and training required for a quality educational experience
- Hire employees that believe and provide all aspects of a quality education
- Provide the infrastructure necessary to fulfill this commitment

## **Faculty, Staff, and Administration Commitments**

- Maintain their expertise by professional development opportunities
- Develop and maintain the resources needed to be successful
- Provide services and learning opportunities that are relevant and of value
- Be timely and clear in responses
- Maintain standards and excellence
- Be fully engaged
- Be available and supportive

## **Student Commitments**

- Be in attendance
- Be fully engaged; participate
- Be prepared
- Be respectful of each other
- Ask questions and seek help
- Assume full responsibility for actions and learning

## **General Education Philosophy**

North Hennepin Community College values independent thinking, creativity, and teamwork; students develop lifelong learning skills to prepare them for the interdependent, changing global economy.

General education provides a foundation of knowledge in a variety of disciplines; students learn to communicate, think, and apply what they learn in their family, career, and social lives.

At NHCC, learners:

- Expand their intellectual capacity by developing deeper, broader understandings of the world and building communication and thinking skills
- Make life decisions by reflecting on their values, connecting them to what they learn, and applying them as engaged citizens
- Engage in scholarly activities, develop an understanding and appreciation of culture, and enjoy the pursuit of knowledge

## Essential Learning Outcomes

### Knowledge of Human Cultures and the Physical World

- Through studies in sciences, mathematics, social sciences, humanities, histories, languages, the arts, technology and professions.

**Focused** by engagement with big questions, both contemporary and enduring

### Intellectual and Practical Skills, including:

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving

**Practiced extensively**, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

### Personal and Social Responsibility and Engagement, including:

- Civic knowledge and involvement – campus, local, and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

**Anchored** through active involvement with diverse communities and real-world challenges

### Integrative and Applied Learning, including:

- Synthesis and advanced accomplishment across general education, liberal studies, specialized studies, and activities in the broader campus community

**Demonstrated** through the application of knowledge, skills, and responsibilities to new settings and complex problems

## Accreditation

North Hennepin Community College is accredited by:

### Higher Learning Commission of the North Central Association of Colleges and Schools (HLC)

30 North LaSalle Street, Suite 2400

Chicago, IL 60602

1-800-621-7440

Accreditation means that North Hennepin Community College has been found to meet the Commission's requirements and criteria. This accreditation provides public certification of acceptable institutional quality.

## Equal Opportunity

North Hennepin Community College 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, sexual orientation, or membership activity in a local commission. In adhering to this policy, the College abides by all applicable statutes and regulations relating to equal opportunity.

## Medical Laboratory Technology Program

### Purpose

This program prepares individuals for a career as a Medical Laboratory Technician (MLT). Medical Laboratory Technicians work as members of the health care team, where they perform laboratory procedures which aid physicians in the diagnosis and treatment of disease. The Medical Laboratory Technician performs routine laboratory tests in blood bank (transfusion service), chemistry, coagulation, hematology, immunology, microbiology, and urinalysis through the use of microscopes, chemical reagents, clinical instruments, and computer systems. In addition to hospital clinical laboratories, employment is available in medical clinics, outpatient facilities, physician offices, and private industry.

Upon successful completion of this program, the student will be eligible to sit for the national certification examination of the profession.

Graduates of this program, who have subsequently obtained national certification, may articulate to the MLS BS degree program at Saint Cloud State University.

### Goal of the MLT Program

Provide curriculum in medical laboratory technology that should enable graduates to:

- Become certified practitioners in the profession (cognitive)
- Function as entry-level technicians in the workplace (psychomotor)
- Maintain high standards of ethics and professionalism (affective)

### Essential Learning Outcomes

#### Knowledge of Human Cultures and the Physical World

- Develop entry-level medical laboratory skills in a clinical setting to prepare for the workplace.

#### Intellectual and Practical Skills

- Develop and demonstrate professionalism and concern for the customer.
- Develop competence in the theoretical knowledge and technical skills necessary for proficient performance of clinical laboratory procedures.
- Utilize effective interpersonal communication skills with customers and co-workers.
- Utilize effective written communication skills appropriate for the professional setting.
- Develop competence in the theoretical knowledge necessary to prepare for the national certification examination of the profession.

#### Personal and Social Responsibility and Engagement

- Value participation in continuous professional development.
- Develop awareness of the role and responsibilities of the medical laboratory technician as a member of the health care team.

#### Integrative and Applied Learning

- Apply critical thinking skills to correlating laboratory findings and common disease processes.
- Apply critical thinking skills to learning new techniques and procedures.

### Accreditation

The Medical Laboratory Technology Program is accredited by:

#### National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

5600 North River Road, Suite 720

Rosemont, IL 60018-5119

847-939-3597 or 773-714-8880

[www.naacls.org](http://www.naacls.org)

## **Commitment to Quality**

### **Faculty Commitments**

- Maintain expertise through professional development
- Develop and maintain resources needed to be successful
- Develop and maintain course-related resources for students
- Provide relevant and effective learning experiences
- Develop appropriate evaluation tools to assess student competency
- Be available to and supportive of students

### **Student Commitments**

- Be in attendance
- Be fully engaged; participate
- Be prepared
- Be respectful of each other
- Ask questions and seek help
- Assume full responsibility for actions and learning

### **Student Learning Responsibilities**

Higher education is an apprenticeship between student and teacher. Initially, the teacher provides example, direction, evaluation, and help. But as time goes on, students become more self-sufficient, more self-directed, and more self-critical. Finally, the student becomes teacher, his or her own teacher.

#### The Learning Set of Responsibilities

1. I have the responsibility to take control of my own learning process.
2. I have the responsibility to think and act positively.
3. I have the responsibility to develop personal strategies for learning and problem solving.
4. I have the responsibility to attend and be engaged in class.
5. I have the responsibility to complete assignments.
6. I have the responsibility to ask questions.
7. I have the responsibility to participate in classroom activities.
8. I have the responsibility to help others when asked.
9. I have the responsibility to not exert influence on others regarding courses or instructors.

The path to success is to accept responsibility. Take charge of your own education!

## **Graduates' Entry-Level Competencies**

Upon successful completion of the MLT program, the graduate should be able to demonstrate entry-level competency in the following areas of professional practice:

1. Collecting, processing, and analyzing biological specimens and other substances (pre-analytical).  
Introduced in Clinical Laboratory Basics and expanded upon throughout the curriculum
2. Performing analytical tests on body fluids, cells and other substances (analytical).  
Introduced in technical didactic courses and expanded upon during clinical experience
3. Recognizing factors that affect procedures and results, and taking appropriate actions within predetermined limits when corrections are indicated (post-analytical).  
Introduced in technical didactic courses and expanded upon during clinical experience
4. Performing and monitoring quality control within predetermined limits.  
Introduced in Clinical Laboratory Instrumentation and expanded upon throughout the curriculum
5. Performing preventive and corrective maintenance of equipment and instruments, or referring to appropriate source for repairs.  
Introduced in Clinical Laboratory Instrumentation and expanded upon throughout the curriculum
6. Applying principles of safe work and infection control practices to ensure laboratory safety  
Introduced in Clinical Laboratory Basics and expanded upon throughout the curriculum
7. Demonstrating professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and with the public.  
Introduced in Clinical Seminar and practiced during applied courses
8. Demonstrating information processing and transmission following established protocols regarding formatting, timeliness, and confidentiality.  
Introduced in Clinical Seminar and practiced during applied courses
9. Recognizing the responsibilities of other laboratory and health care personnel and interacting with them in respect to their jobs and patient care.  
Introduced in Program Orientation and practiced during applied courses
10. Applying basic scientific principles and critical thinking skills in learning new techniques and procedures.  
Introduced in Clinical Laboratory Basics and reinforced throughout the curriculum
11. Relating laboratory findings to common disease processes and recognizing critical results.  
Introduced in technical didactic courses and reinforced during clinical experience
12. Establishing and maintaining continuing education as a function of growth and maintenance of professional competence.  
Introduced in Program Orientation; opportunities offered during clinical experience
13. Demonstrating technical skill development and the application of educational methodologies sufficient to train others in the workplace.  
Introduced in Clinical Seminar and practiced during applied courses

## Medical Laboratory Technology Program Faculty

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## Medical Laboratory Technology Program Courses

This program is designed to give students a background in the basic sciences and a working knowledge of medical laboratory procedures. The first year of the program will be spent in the classrooms and laboratories at North Hennepin Community College, and will include the following MLT department courses:

### Description and Objectives of Didactic Courses

#### MLT 1000

##### ***Clinical Laboratory Basics***

Objectives: Upon completion of this course, the student should be able to:

Discuss safety and infection control issues related to the clinical laboratory.

Demonstrate proper use of engineering controls and personal protective equipment.

Discuss and demonstrate basic laboratory skills including pipetting and microscope use.

Perform routine laboratory math calculations and basic quality control procedures.

Discuss and demonstrate, on a fake arm, basic venipuncture technique (MLT).

Topics Covered:

Clinical laboratory safety and infection control; systems of measurement and temperature conversions; pipettes and glassware; dilutions; reagent water, reagents, and solutions; quality assurance, quality control, and graphs; microscopes; specimen collection

Credits: 1      Semester: first Fall

#### MLT 1100

##### ***Clinical Urinalysis/Body Fluids***

Objectives: Upon completion of this course, the student should be able to:

Discuss the uses of bright field, phase contrast, and polarizing microscopes for urinalysis.

Demonstrate correct usage and care of the microscope. Demonstrate correct operation

of the centrifuge. Explain the structure and function of the urinary tract. Explain

collection and processing of urine specimens. Identify, analyze, and report physical

properties, chemical properties, and urine constituents, including QC and QA. Explain

the presence of normal and abnormal constituents in urine. Explain the chemical

reactions in special tests and correlate results to disease states. Explain semen analysis

test results and their relationship to fertility. State the characteristics that differentiate

other body fluids. Demonstrate competency in the use of the hemacytometer. Identify

normal white blood cells.

Topics Covered:

Microscopes, centrifuge, the urinary system, renal function, collection and preservation of urine, complete urinalysis, confirmatory tests, quality control, quality assurance, diseases of the kidney, special UA screening tests, semen analysis, amniotic fluid analysis, sweat chloride test, gastric, fecal, and stone analysis, hemacytometer counts, and normal white blood cells.

Credits: 2      Semester: first Fall

**MLT 1200**

***Clinical Laboratory Instrumentation***

Objectives: Upon completion of this course, the student should be able to: Identify the basic functional units of analytical instruments. Identify the electronic functional units of analytical instruments. Discuss laboratory safety precautions concerning laboratory instrumentation. Discuss the basic construction and operating principles of spectrophotometers. Discuss the construction and operating principles of ion-selective electrodes. Discuss laboratory instrumentation quality control. Explain basic care and maintenance procedures on various laboratory instruments.

Topics Covered:

Development of laboratory instrumentation and basic functional units; electricity, circuits, resistors, capacitors, diodes, transformers, power supplies, detectors, signal processing units, and readout devices; safety; basic elements of colorimeters and absorbance. Common instrument components including fluorometry, ion-selective electrodes, thermal conductivity detection, coulometric titration, electrophoresis, densitometers, particle counting, differential counting, coagulation devices, hemoglobin measuring, moving stream principle, discrete chemical analysis, heating and cooling devices, centrifuges, balances, and osmometers. For selected laboratory instrumentation: quality control, maintenance, and repair.

Credits: 1      Semester: first Fall

**MLT 1250**

***Clinical Immunology***

Objectives: Upon completion of this course, the student should be able to: Discuss the characteristics and functions of selected immune system components. Describe the theory and principles of immunology test systems and instruments including limitations of each technique.

Discuss disease states diagnosed by immunologic tests with reference to etiologic agent, epidemiology, disease manifestations, and laboratory techniques.

Accurately perform specified immunology calculations and procedures.

Topics Covered:

An overview of basic immune system function, infectious disease and serology, specific topics covered in this course may include: laboratory assay principles such as precipitation, agglutination and labeled immunoassays; immune disorders such as autoimmunity, tumor immunology, and immunoproliferative/immunodeficiency diseases; and the serological diagnosis of disease states.

Credits: 2      Semester: first Spring

**MLT 2050**

***Clinical Hematology***

Objectives: Upon completion of this course, the student should be able to: Describe and identify cellular components of blood and bone marrow. Discuss the function of cellular components of blood and bone marrow. Correlate cells with disease states. Discuss the various steps and factors in the coagulation scheme. Describe the principles of hematology and coagulation instrumentation. Accurately perform specified hematology procedures including CSF and body fluids.

Topics Covered:

Anticoagulants in blood, microhematocrit centrifugation, spectrophotometry, and components of the blood and the bone marrow/RE system

Wright's stain, slide making, hemoglobin, hematocrit, RBC morphology and maturation, reticulocyte counts, and Heinz bodies stain. WBC maturation and morphology, WBC kinetics, and hemacytometer WBC

Platelet counts, platelet maturation and morphology, complete differentials, sickle cell screening tests, erythrocyte sedimentation rates, osmotic fragility, Kleihauer-Betke stain, and Prussian Blue

Anemias, WBC diseases - qualitative and quantitative, myeloproliferative disorders, lymphoproliferative disorders, instrumentation, coagulation testing and diseases, spinal fluids and body fluid cell counts and differentials, and miscellaneous diseases

Credits: 4      Semester: first Spring

**MLT 2080**

***Clinical Microbiology***

Objectives: Upon completion of this course, the student should be able to: Discuss the clinical relevance of 80% of the usually isolated microorganisms (bacteria, fungi, parasites, and viruses). Perform a variety of bacteriological methods allowing for the identification of 90% of the usually occurring bacteria. Outline and perform concentration and staining techniques used for the identification of parasites. Microscopically identify commonly occurring parasites. Perform basic mycological bench procedures allowing for the identification of 80% of the usually occurring yeast and molds. Discuss initial virology procedures for the preservation and transport of clinical specimens. Prepare, stain and microscopically examine clinical materials and culture isolates.

Topics Covered:

Signs of infection, specimen collection and transportation, specimen preparation, preliminary identification, Enterobacteriaceae, nonfermentative GNB, miscellaneous and fastidious GNB, Legionella, Haemophilus, Neisseria and Moraxella, Staphylococci, aerobic gram positive bacilli, anaerobic bacteria, anti-microbial susceptibility testing, mycobacterium, mycology, parasitology, virology, and spirochetal diseases.

Credits: 4      Semester: Summer

**MLT 2100**

***Clinical Chemistry***

Objectives: Upon completion of this course, the student should be able to: Describe the processes involved in the metabolism of carbohydrates, proteins, lipids, and drugs. Discuss acid-base physiology, electrolyte balance, liver function, endocrine function, and enzyme function. Relate the theory and principle of analytical procedures and instruments including reagent and specimen requirements. Correlate clinical chemistry assay results and diagnostic significance. Accurately perform specified clinical chemistry calculations and procedures.

Topics Covered:

An overview of clinical chemistry; specific topics covered in this class may include: basic principles of clinical chemistry, laboratory mathematics, therapeutic drug monitoring/vitamins, non-protein nitrogen, carbohydrates, proteins, electrolytes, acid-base balance/blood gases, lipids/lipoproteins, endocrinology, enzymology, and liver function.

Credits: 4      Semester: second Fall

**MLT 2150**

***Clinical Immunohematology***

Objectives: Upon completion of this course, the student should be able to: Describe the basic methods and apply the principles used in immunohematology. Identify the major blood group systems and relate their importance in transfusion. Perform the various pre-transfusion testing techniques with competence. List the general health requirements for volunteer blood donors. Identify the blood and components used in transfusion with reference to their indications for use. Describe the preparation and storage requirements for the blood and blood components. Describe Blood Bank Information and Quality Systems Essentials.

Topics Covered:

Basic genetics and immunology applied to transfusion; ABO and Rh blood group systems; other major blood group systems; pre-transfusion compatibility testing; antibody detection; transfusion therapy; donor selection and component preparation; hemolytic disease of the newborn; immune hemolytic diseases; HLA system and transfusion; information systems; and quality assurance.

Credits: 3      Semester: second Fall

## **Description and Objectives of Applied Courses**

During the last semester of the second year, when all other courses are completed, clinical experience will be obtained at one or more of the clinical affiliates currently available:

Allina Health Laboratory (see Appendix F for a list of potential sites), multiple locations  
Student schedules at Allina include experiences at least one hospital and at least one clinic. Students are placed in rotations based on proximity to their residence as much as possible.

Park Nicollet Health Services Clinic and Methodist Hospital, St. Louis Park, MN  
North Memorial Health Care, Robbinsdale, MN  
CentraCare Health – CentraCare Laboratory Services, St. Cloud, MN; Monticello, MN  
HealthEast Medical Laboratory, Woodbury, MN; St. Paul, MN  
Fairview Health Services, multiple locations  
FirstLight Health System, Mora, MN  
Glencoe Regional Health Services, Glencoe, MN  
Affiliated Community Medical Centers, Willmar, MN  
Maple Grove Hospital, Maple Grove, MN  
Hutchinson Health, Hutchinson, MN  
Ridgeview Medical Center, Waconia, MN

**Students may be placed at clinical sites based on availability of sites, academic standing, interview performance, and proximity to the student's residence. Students will be notified of clinical site placement during the second fall semester. If a student turns down a clinical site offer for any reason, that student will be placed at the bottom of the priority list for clinical site placement and will be offered one additional clinical site opportunity after all other students in their cohort have been placed. If a student turns down a second clinical site placement, he/she will be dismissed from the MLT program.**

**\*\*A Clinical Entrance Examination** is scheduled at the end of the semester before clinical rotations begin. The examination will consist of both a written and a practical portion.

- Students must pass with a minimum of 70% on each of seven sections before they are eligible to begin clinical rotations.
- Students will be allowed to repeat section(s) on which they score less than 70% one time only, if the following conditions are met on the first exam: at least 4 of the 7 sections are passed with a score of 70% or higher AND the average % score for all 7 sections is at least 62%.
- Students delayed from starting their clinical rotations as scheduled will need to re-take the clinical entrance exam (all sections) within one month prior to starting clinical experience.

**Students failing to meet the above stated Clinical Entrance Exam criteria on the first attempt will have their clinical experience delayed by a minimum of one semester. They will be eligible to qualify for their clinical experience by retaking the exam one additional time on a regularly scheduled exam date. The exam is given once per semester. Students who meet the criteria on the first attempt will be given first priority for clinical experience placement.**

## **SERVICE WORK POLICY**

During the clinical rotation, students are not employees of the laboratory, are not to be paid for internship hours, and must be supervised at all times by clinical site employees who have been deemed competent in the tasks and procedures that the student is performing. A student previously deemed technically competent in a specific task covered in the usual rotation sequence (i.e. phlebotomy), will not be expected to perform that task during the student clinical rotation.

The Clinical Rotation is approximately one semester (19 weeks) in length. Allina Health rotations will start with one week of orientation and training. Length of time in each clinical area may differ at each Affiliate site. The clinical experience will include the following courses:

**MLT 2310      *Applied Phlebotomy***

Objectives: Upon completion of this course, the student should be able to:

Apply the principles and methodologies of blood collection to the clinical setting and to demonstrate competency in venous blood collection, specimen labeling and handling, and quality patient interaction.

Topics Covered:

Venipuncture and special blood collection procedures as available; safe work practices, specimen labeling and handling, specimen processing, and confidentiality

Length (days): 5 (1 week)

Credits: 1

**MLT 2320      *Applied Hematology***

Objectives: Upon completion of this course, the student should be able to:

Apply the principles and methodologies of basic hematology testing, including manual methods, cell counts, CSF and body fluids, special tests, differentials and coagulation and to demonstrate proficiency in these procedures.

Topics Covered:

Manual methods; CSF and body fluids; differentials; instrumentation; bone marrows; and special tests

Length (days): 15 (3 weeks)

Credits: 2

**MLT 2330      *Applied Coagulation***

Objectives: Upon completion of this course, the student should be able to:

Apply the principles and methodologies of basic coagulation testing and to demonstrate proficiency in these procedures.

Topics Covered:

Coagulation and related instrumentation.

Length (days): 5 (1 week)

Credits: 1

**MLT 2340      *Applied Urinalysis***

Objectives: Upon completion of this course, the student should be able to:

Apply the principles and methodologies of basic chemical reactions associated with routine urinalysis and to demonstrate competency in these procedures. To correctly identify normal and abnormal elements found in microscopic examination of urine and to recognize contaminants and artifacts. To attain a workable knowledge of tests other than routine urinalysis.

Topics Covered:

Routine urinalysis and correlation of test results; fecal analysis; special tests

Length (days): 10 (2 weeks)

Credits: 1

**MLT 2350      *Applied Microbiology***

Objectives: Upon completion of this course, the student should be able to:

Apply the principles and methodologies of microbiology to the clinical setting and to demonstrate competency in specified procedures.

Topics Covered:

Urine, respiratory, blood, and stool cultures. Miscellaneous cultures, such as abscess, wound, genital, and body fluids.

Length (days): 20 (4 weeks)

Credits: 2

**MLT 2360**

***Applied Immunohematology***

Objectives: Upon completion of this course, the student should be able to:

Apply the principles and methodologies of immunohematology to a transfusion service clinical setting; demonstrate adherence to transfusion service policies and competency in specified procedures.

Topics Covered:

Pre-transfusion compatibility testing for safe blood component therapy, blood component selection for transfusion, adverse reactions to transfusion, component inventory, routine perinatal testing, and quality assurance practices.

Length (days): 15 (3 weeks)

Credits: 2

**MLT 2380**

***Applied Chemistry***

Objectives: Upon completion of this course, the student should be able to:

Apply the principles and methodologies of clinical chemistry analysis to the clinical setting and to demonstrate competency in specified procedures.

Topics Covered:

Various chemistry diagnostic tests and methods as performed at the clinical site.

Length (days): 20 (4 weeks)

Credits: 2

**Other:**

Review Workshops will be scheduled during Fall Semester before clinical rotations.

Topics covered include Immunology, Urinalysis, Hematology, and Microbiology.

Clinical Orientation will be conducted during Fall Semester before clinical rotations.

Journal Article Summaries will be scheduled during the clinical rotations.

Comprehensive Examination will be completed within one week on completing rotations.

## **BACKGROUND STUDY**

An integral part of the MLT Program is the clinical experience. To provide this experience, the College contracts with local health care facilities.

Minnesota law requires that any person who provides services that involve direct contact with patients and residents at a health care facility licensed by the Department of Human Services (DHS) or the Minnesota Department of Health (MDH) must have a background study conducted by the state. An individual who is disqualified from having direct patient contact as a result of the background study will not be permitted to participate in a clinical placement in a Minnesota licensed health care facility. Failure to participate in a clinical placement required by the academic program could result in ineligibility to qualify for a degree in this program.

These background study requirements are found in Minnesota Statutes, chapter 245C, section 241.021, and section 144.057. "Direct contact services" is defined in Minnesota Statutes, section 245C.02, subdivision 11, as "providing face-to-face care, training, supervision, counseling, consultation, or medical assistance served by the program."

If as a result of the background study a student is disqualified from providing direct contact services, it is highly unlikely that the educational facility will be able to provide participation in clinical experience. If a student refuses to cooperate in the background study, any clinical facility will refuse to allow clinical experience participation. The MLT Program does not guarantee an alternative facility placement in either of these situations. If no facility placement is available, you may be terminated from the MLT Program.

Background studies will be initiated by the College at the beginning of the second year in the program. Forms provided by the MN Department of Human Services Licensing Division will be distributed to each student during the Clinical Orientation course to be completed by the student and submitted to the State.

## **ESSENTIAL FUNCTIONS**

Essential functions represent the essential nonacademic requirements of the program that a student must be able to master to become employable. Examples of this program's essential functions are provided below. The National Accrediting Agency for Clinical Laboratory Science, in compliance with the Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973, requires us to define and publish essential functions. *If you are not sure that you will be able to meet these essential functions please consult with the MLT Program Director for further information and to discuss your individual situation.* If restrictions are necessary due to a disability, reasonable accommodations will be made. To receive accommodations, the student must contact Disabilities Access Services at 763-493-0555 or through Minnesota Relay 1-800-627-3529.

SEE complete list in APPENDIX C IMMUNIZATION RECORD AND PHYSICAL EXAMINATION FORM

## **DRUG SCREENING**

An integral part of the MLT Program is the clinical experience. To provide this experience, the College contracts with local health care facilities. Some health care facilities require a negative urine drug screen for all employees and students who provide patient care. Should a student be placed at a site that requires urine drug screening, it will be the student's responsibility to obtain testing and submit results to the clinical site at least two weeks prior to the start date of their rotation.

## PROFESSIONAL CONDUCT STANDARDS

### PROFESSIONALISM

The following is a list of expected professional behaviors for the Medical Laboratory Technician. Items listed below each category are examples and may not be all-inclusive.

1. Readily adjusts behavior to the changing work environment of the laboratory. (Adaptability)
2. Adheres to the established dress code of the MLT program or laboratory. (Appearance)
  - Clean and neat; body odors are not offensive; wearing of fragrance is prohibited.
3. Complies with attendance policy of the MLT program or laboratory. (Attendance)
  - Punctual - arrives on time as scheduled and is ready to start assignments.
  - Only uses the allotted time for breaks and lunch.
  - Notifies appropriate person of absences or before leaving the area.
  - Uses lag time in a constructive manner.
4. Displays a positive attitude toward the subject or laboratory department. (Attitude)
  - Performs work as assigned without derogatory comments.
  - Follows directions precisely.
5. Displays resourcefulness and realistic confidence in abilities. (Confidence)
  - Clarifies unclear instructions before starting or continuing with a procedure.
  - Utilizes resources when appropriate. (personnel, procedures, reference books)
  - Is aware of own limitations and seeks appropriate help when needed.
6. Responds to criticism in a positive manner. (Criticism)
  - Accepts constructive criticism and willingly works to effect change.
  - Does not make excuses for inappropriate behaviors.
7. Performs assigned work willingly and independently. (Initiative)
  - Completes assignments in a timely fashion.
  - Assists others in completing routine tasks without prompting.
  - After completing assigned work seeks additional work.
  - Keeps work areas clean and well stocked.
8. Accepts responsibility for own work. (Integrity, Judgment, Common Sense)
  - Admits mistakes and works to correct them.
  - Treats patient/coworker information in a confidential manner.
  - Completes paperwork as required by regulatory agencies/laboratory.
  - Recognizes errors in performing lab work and notifies instructor immediately.
9. Works cooperatively with instructors, other students, lab personnel, and other customers. (Relations with Others)
10. Complies with all lab safety regulations. (Safety Awareness)
  - Wears appropriate barriers as needed.
  - Adheres to all safety standards and procedures.
  - Does not put others at risk.
11. Responds to the demands of stressful or unusual laboratory/patient contact situations in an acceptable manner. (Professional)
  - Remains calm under pressure; does not use foul language.
  - Responds to agitated individuals in a calm and professional manner.
  - Communication is appropriate and easily understood.
  - Does not spend excessive time discussing personal problems.

## ATTENDANCE/ABSENCE/LATENESS POLICIES

- Class attendance is required during lecture periods.
- Class attendance is required during testing periods.
- Class attendance is required during laboratory sessions.
- Attendance is required for all clinical rotation days.
- Students are held responsible for all class content and announcements.

***When you are unable to attend a class or laboratory session you MUST notify the instructor prior to the start of class, or as soon as possible. (see below for policies regarding attendance)***  
**For didactic courses (on campus), a message should be left on the instructor's phone or sent to the instructor's email address.**

***For clinical experience (applied) courses, a message should be left with the laboratory department, the lab section you are scheduled in, and the Program Director or Education Coordinator. Refer to the Clinical Rotation Manual for specific telephone numbers.***

## LATENESS

Students are expected to arrive on time for classes, laboratory sessions, and clinical rotations. REPEATED LATENESS will be documented on course competencies, and will be referred to the Appeals Committee as appropriate.

### **First occurrence of lateness in a semester/rotation:**

Students who are late must meet with their instructor to explore the reason for their behavior. The Instructor will complete a Student Absence/Tardiness Report form (Appendix A) and this will become part of the student's file.

### **Second occurrence of lateness in a semester/rotation:**

The Instructor will complete a Student Absence/Tardiness Report form (Appendix A) as before and a loss of 2% on the grade for the day will be assessed.

### **Third occurrence of lateness in a semester/rotation:**

The Instructor will complete a Student Absence/Tardiness Report form (Appendix A) as before and a loss of 5% on the grade for the day will be assessed.

Additional incidents lateness will be referred to the Program Director.

Special approval from the Instructors and Program Director may be available dependent upon specific student situations. This must be discussed **before** the class begins.

## EXCUSED ABSENCE

Excused absences will include student illness, immediate family member (spouse, dependent) illness requiring supervision by the student, or immediate family member (parent, spouse, dependent) funeral. Other circumstances for absence may be determined as "excused." Course work/rotation time will need to be made up at the discretion of the Instructor. The Instructor will complete a Student Absence/Tardiness Report form (Appendix A) and this will become part of the student's file.

Excessive absences, as determined by the Course Instructor and the Program Director, may result in the student being asked to withdraw from a course. Excessive absence from more than one course may result in dismissal from the Program

## UNEXCUSED ABSENCE

Definition: Missing class/lab/clinical rotation without notifying the instructor prior to the start of the session. Other circumstances may be determined as unexcused absences.

When a student has not given prior notice of absence, the Instructor will complete a Student Absence/Tardiness Report form (Appendix A) and this will become part of the student's file. In addition, 2% will be deducted from the final course grade for the first infraction, a total of 5% deducted following the second infraction, and an additional 5% deducted for each unexcused absence thereafter.

## MISSED EXAMINATIONS

If an exam cannot be taken on the scheduled day, permission must be obtained from the Instructor prior to the test date.

### EXCUSED ABSENCE ON EXAM DAY

First occurrence: the Instructor will complete a Student Absence/Tardiness Report form (Appendix A) and this will become part of the student's file.

Second occurrence will result in 2% reduction of the test grade.

Third occurrence will result in a 5% reduction in the test grade.

Each additional occurrence will result in an additional 5% reduction in the test grade.

***Arrangements must be made by the student with the Instructor within 24 hours to take the exam or receive a score of "0" for that exam.***

### UNEXCUSED ABSENCE ON EXAM DAY

First occurrence will result in 2% off of the exam PLUS 2% off of the final course grade per the unexcused absence policy.

Second occurrence will result in 5% off of the exam PLUS 5% off of the final course grade per the unexcused absence policy.

Each additional occurrence will result in an additional 5% off of the exam PLUS an additional 5% off of the final course grade for each infarction thereafter.

***Arrangements must be made by the student with the Instructor within 24 hours to take the exam or receive a score of "0" for that exam.***

### ADDITIONAL

Special approval from the Instructors and Program Director may be granted dependent upon student situations. This must be discussed **before** the test day.

Consistent failure to take tests as scheduled will be noted on a Record of Ineffective Behavior form (Appendix B) and become part of the student's file.

## RECORDS OF ABSENTEEISM

Records are kept as a point of reference for future employers.

## INSTRUCTOR ABSENCE

When an instructor is unable to be present for his/her scheduled class at NHCC, students will be informed as soon as possible as to whether the class is canceled or if a substitute instructor cannot be there to assist them. Class cancellations are posted on the NHCC website.

## •BAD WEATHER

### **Didactic courses at NHCC:**

College closings are announced on WCCO 830 AM radio and posted on the College website.

### **Clinical rotations at the Healthcare Facilities:**

Students are expected to be there when scheduled. Facility policies override the College policy.

## **INTEGRITY IN THE MEDICAL LABORATORY FIELD**

- It is the responsibility of each member of the profession to ensure the right of the patient to receive safe and adequate care. It follows that all responsibility of honesty in learning which is basic to competence and thus patient safety is a moral and legal responsibility of the student regarding his/her own actions and the actions of other members of the group.
- It is also the responsibility of each member of the profession to act professionally in all laboratory and classroom situations. This includes acting safely in all situations.
- Students are expected to be honest in completing all classroom and clinical assignments. Cheating, theft, plagiarism and not completing your own assignments are not acceptable. Specific definitions of and penalties for dishonesty are the prerogative of each Instructor. (See the North Hennepin Community College Student Handbook for related policies.)
- Examples of violations of this policy include, but are not limited to:
  1. cheating on exams in the classroom or testing center
  2. copying in part or in whole another student's written material
  3. falsifying information
  4. failure to report known clinical errors
  5. use of profane or inappropriate language
  6. displays of inappropriate anger
  7. disregarding safety protocols, including dress code policies
- Violations of this policy will result in immediate referral to the Appeals Committee with a recommendation for dismissal from the Medical Laboratory Technology program. Any student dismissed for violation of this policy will not be eligible for re-admission consideration.

## **CONFIDENTIALITY**

Patients and their relatives are often anxious to find out the results of laboratory tests. Under no circumstances is it ethical for a Medical Laboratory Technician to discuss the results of a laboratory test with anyone except a Pathologist or the physicians employing the technician. The results of tests should not even be divulged to physicians not in charge of the patient. All inquiries should be referred tactfully to a Pathologist or the employing physician. In particular, a Medical Laboratory Technician should not discuss medical or laboratory subjects with patients or their relatives and friends. Such discussions are frequently misunderstood and misinterpreted, with resultant mental anguish and possibly serious consequences. The general rule is what you see, hear, learn at the workplace should stay at the workplace. Discussions outside of the laboratory may result in breach of confidentiality and end in litigation.

## **MLT CODE OF ETHICS**

Being fully aware of my responsibilities in the practice of Medical Laboratory Technology, I affirm my willingness to discharge my duties with accuracy, thoughtfulness, and care. I realize that knowledge obtained about patients in the course of my work must be treated as confidential; therefore I will hold inviolate whatever confidences are entrusted to me by patients and physicians. I will divulge such information only to the physician treating the patient or a Pathologist in the laboratory.

I will give out no interpretations of laboratory results other than those relating to technical aspects of the tests. I will not advise physicians or others relative to the diagnosis or treatment of a disease. Only a Pathologist is qualified to act as interpreter. Even seemingly obvious results may have an entirely different meaning from that which seems apparent. A strongly positive serologic test for syphilis does not necessarily mean that the patient has syphilis; a positive test for pregnancy does not necessarily mean that the patient is pregnant; a high blood glucose does not necessarily mean diabetes; a high white blood count with immature cells does not necessarily mean leukemia.

I recognize that my personal integrity must be pledged to the absolute reliability of my work. I will conduct myself at all times in a manner appropriate to the dignity of my profession.

A Medical Laboratory Technician must be prepared to face occasional evidences of bad temper, and seemingly unreasonable demands or unfair criticism on the part of patients or their relatives. Such situations must be met with tact and good judgment. It must be realized that a person suffering from any ailment, regardless of its nature, may temporarily show evidence of unusual mental reactions that seem entirely unrelated to the physical ailment. Sometimes close relatives of a patient may show even more exaggerated reactions than the patient himself. A Technician should take into consideration the possible reasons for such behavior, and make a real effort to cope smoothly with occasional unpleasant situations. Be sympathetic and compassionate.

I will follow the Institution's guidelines for the release of medical data on patients. There are frequent occasions when the life of a patient depends on the speed and accuracy of laboratory tests. In the training of a Medical Laboratory Technician, these aspects of laboratory work must constantly be remembered and emphasized.

Medical Laboratory Technicians must be ready to face emergencies with knowledge, mastery of techniques, cool minds and sound judgment. In a true emergency, they must show a willingness to serve at any hour of the day or night or on weekends of holidays, until the emergency situation is over. This is part of medical ethics of the Medical Laboratory Technician just as it is a part of the medical ethics of the physician.

## **SAFETY STANDARDS**

Each student is responsible for becoming knowledgeable regarding the expectations and policies of the MLT Program and the Clinical Affiliate where the student is placed.

- Since medical history and examination cannot reliably identify all patients infected with bloodborne or other transmissible pathogens, Blood and Body Fluid Standard Procedures are to be adhered to at all times. (Standard Precautions)
- All health care workers must routinely use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with any blood or body fluids may be anticipated.
- Gloves must be worn when handling specimens and items or surfaces soiled with blood or body fluids, when performing specimen collection procedures, or any time when exposure may occur.
- Hands must be washed immediately after gloves are removed. Hands and other skin surfaces must be washed immediately and thoroughly if contaminated with blood or other body fluids.
- All health care workers must take precautions to prevent injury caused by needles and other instruments or devices during procedures. Appropriate engineering controls, personal protective equipment, and safe work practices should be used at all times. To prevent needle stick injuries, needles should not be recapped, purposely bent or broken, removed from syringes, or otherwise manipulated by hand. Needle safety devices should be engaged as soon as possible.
- Laboratory work involves dealing with chemical reagents and other hazardous materials. For this reason, all personnel, including students, are required to wear face protection and gloves while working in designated areas of the laboratory.
- North Hennepin Community College and its clinical affiliates adhere to Blood and Body Fluid Standard Procedures (Standard Precautions). Instructors will outline specific course/department requirements as needed. It is required that students are trained in the details of the OSHA Blood Borne Pathogen Standards and Safety. This will be introduced in MLT 1000 Clinical Laboratory Basics, and compliance will be expected thereafter. Appropriate documentation will be kept for each student.

## **DRESS CODE**

All students will be **required** to wear closed-toe and closed-heel non-skid or rubber soled shoes during **all class sessions**. Legs must be covered at all times. This can be accomplished by wearing long pants or hosiery. Socks/hosiery must be worn at all times. **Lab coats must be worn for all laboratory sessions. Gloves will be required for the handling of all specimens and for collecting blood samples.** If dermatological problems arise because of the gloves, cotton glove liners can be obtained. The use of perfume, cologne, and other scented products is forbidden as a courtesy to those who may have allergies to these substances. Dress code policies will be distributed prior to the clinical experience for each institution providing experiences. Failure to comply with the dress code policy may result in immediate dismissal from the Program.

## **POLICY ON UNSAFE BEHAVIORS IN STUDENT AND CLINICAL LABORATORIES**

A major consideration of any workplace interaction is safety, and it is the responsibility of the student or employee to provide for this need in any patient/co-worker contact.

Students are legally responsible for their acts of commission and/or omission.

- Any act of unsafe behavior by a student requires evaluation by the Instructor and the Program Director. An error requires completion of a Record of Ineffective Behavior form (Appendix B), which becomes part of the student's file. Serious acts of unsafe behavior will be reviewed by the Appeals Committee to determine progression in the Program.  
Unsafe behaviors include but are not limited to:
  - a. inappropriate assumption of independence in action or decisions.
  - b. violation of learning and principles from present/prior objectives dealing with specific procedures, techniques, skills, e.g. drawing the wrong patient, altering test procedures.
  - c. lack of integrity demonstrated in MLT interventions, e.g. covers errors or does not report them to appropriate individuals for action.
  - d. physical or mental condition endangering the welfare of others in the clinical area.
  - e. failure to check name band before performing a venipuncture.
  - f. failure to follow laboratory safety standards.

## HEALTH RELATED ISSUES

### IMMUNE STATUS REQUIREMENTS

Medical Laboratory Technology students will be working with human blood and body fluid specimens in student laboratories on a regular basis. These specimen carry the risk of spreading blood borne pathogens. It is therefore required for the safety of the student that the following immunizations are obtained prior to beginning MLT courses:

1. **Hepatitis B** - documentation of immunity status or signed waiver declining vaccination

***The completed Hepatitis Immunization Record form (See Appendix C) must be submitted to the Program Director before a student can be allowed to handle blood and/or body fluid specimens in the student lab.***

During their clinical experience, Medical Laboratory Technology students are assigned in clinical areas where exposure to infectious and communicable diseases is common. It is therefore required for the safety of both the student and patients that the following immunizations or documentation of acquired immunity are obtained:

1. **Tuberculosis Testing** - evidence of negative 2-step TB Skin Test (TST) or Blood Assay (BAMT) required within previous 6 months before starting clinical rotation. If TB test is positive, evidence of negative chest x-ray (CXR) and no signs or symptoms of active TB is required.
2. **Documentation of immunity is required**, by reliable history of the disease, positive serology, or history of vaccination, for the following:
  - **Varicella (Chicken Pox)**
  - **Mumps**
  - **Rubella (German Measles)**
  - **Rubeola (Red Measles)**
3. **Hepatitis B** - documentation of immunity status or signed waiver declining vaccination
4. **Pertussis (Tdap)** - documentation of one dose of adult Tdap vaccine is required
5. **Influenza** - annual vaccination is required

***The completed Immunization Record and Physical Examination (See Appendix C) forms must be submitted to the Program Director before a student can be allowed to start clinical experience rotations.***

The purpose of the Physical Examination is to:

- verify that the student has no active contagious / communicable diseases in evidence.
- verify that the student can perform the essential functions as stated, or evaluate for accommodations necessary to perform these functions. Reasonable accommodations will be provided in the classroom and at the clinical site(s).
- attest to up-to-date immunizations as listed.

### HEALTH INSURANCE

All students are strongly advised to have adequate health insurance coverage. Any health care costs incurred during the period of time you are a student in the MLT Program will be your responsibility. Student health insurance information is available through the College. Information can be found at the information desk in Educational Services or in the Campus Center.

### WORKERS' COMPENSATION

It is the position of the clinical facilities and the College that, as an MLT student, you are neither an employee of the clinical facilities to which you are assigned nor of the College for purposes of workers' compensation.

### **DATA PRACTICES ADVISORY AND INFORMED CONSENT**

Some facilities impose certain requirements regarding the health of persons working in their facilities and may require that health information about students in clinical site programs be made available to them. The College may ask you to provide health information, which will be used to determine whether you meet a clinical site's health requirements for care providers. Health information collected is private data on you. A clinical site may refuse to allow you to participate based on data provided by you. The information provided would be disclosed as needed to the College's MLT Program Director and should any clinical site request the data, to any clinical site where you are placed as a student. You are not legally required to provide this information to the College. However, refusal to provide the information requested could mean that a clinical site might refuse to accept you. The MLT Program does not guarantee an alternative facility placement in such an event. If no alternative facility placement is available, you will be terminated from the Program.

### **PREGNANT STUDENTS**

It is advised that pregnant students inform the Program Director and Instructors of this fact. This will allow the program officials to advise the student of any additional health risks that may be present as a result of participating in the program. Communications of such a nature will be held in confidence.

## ACADEMIC STANDARDS

### EXPECTATIONS

- You are expected to be in class when scheduled and to have arrived on time.
- You are expected to notify the Instructor if you cannot attend or if you are expecting to be late.
- You are expected to dress appropriately for class sessions and to comply with safety regulations.
- You are expected to complete assignments in the time frame designated by the Instructor.
- You are expected to come to class prepared.
- You are expected to participate in class discussions and group activities as assigned.
- You are expected to be honest in all of your coursework.
- You are expected to behave in a professional manner.
- You are expected to meet clinical competencies specified for each MLT course.

### COURSE GRADING POLICIES

Evaluation of student performance includes consideration of knowledge level, skill level, and affective (non-academic) behavior. Instruments used in the evaluation process are based on written objectives and include written and oral examinations, take home and special assignments, and specific evaluation forms prepared for each rotational area and class (see examples in Appendix D).

The grading scale is as follows:

100 - 92%	A
91 - 84%	B
83 - 76%	C
75 - 70%	D
69 - 00%	F

Students are required to obtain a minimum grade of "C" for **each** of the MLT department courses, including **each** of the clinical courses, and in **each** of the program-required general education courses.

To obtain a minimum grade of "C" a student must meet **all\*** of the following requirements for each MLT department course, including clinical (Applied) courses:

Psychomotor Laboratory Technical Evaluation	minimum of 76%
Affective Course Performance Evaluation	minimum of 76%
Didactic Course Evaluation (quizzes, exams, etc.)	minimum of 76%

\*A grade of no higher than a "D" will be given to a student who does not meet all of these three essential requirements for an MLT course.

Specific grading criteria for each course are found in each respective course syllabus.

The instructor or student may initiate a conference if the student is not achieving the minimum performance needed to pass a course. The instructor and student will attempt to identify the problem and determine how the student can improve their performance. If a student fails to maintain expected performance, progression in the program will be evaluated by the Program Director, Dean of Health Careers, and the program instructors.

Satisfactory performance demands not only on a passing level in the technical and academic skills, but also implies compliance with professional behaviors. Students are expected to develop to the stated level in the professional conduct standards and will be evaluated on these standards via the MLT Program Affective Evaluation in each course. If a student fails to achieve this performance, his or her record will be reviewed by the Program Director, Dean of Health Careers, and the program instructors for further recommendations. Dishonesty in any form will not be tolerated, and will be considered a cause for immediate dismissal. Contracts outlining specific expectations for students may be utilized to ensure the student's success.

## **COURSE PASS/FAIL POLICY**

A student who appears to be heading toward a failing grade in a course will receive notification that his/her progress is so far unsatisfactory. Instructors will be available for providing students in this situation with specific guidelines to improve their performance. If the course is ultimately failed, continuation in the Program will be evaluated.

A **failing grade ("D" or "F")** is to be expected in any MLT course if the student has not maintained at least an average of 76% on all evaluation tools. (Specific policy is stated under **GRADING** above)

An **incomplete "I" can be issued when extenuating circumstances apply** (e.g. extended illness, surgery, maternity leave). An incomplete may only be given when a student's progress has been satisfactory up to the granted leave time and will be overwritten by the earned grade when the assigned work is completed. According to College policy, all work for an incomplete course must be completed before the end of the subsequent semester, or the grade of "F" will be issued in place of the "I."

## **REMEDIAL POLICIES FOR MLT COURSES**

**Each student must obtain a grade of "C" or better for each of the four 1000-level MLT courses: MLT 1000 Clinical Laboratory Basics, MLT 1200 Clinical Laboratory Instruments, MLT 1100 Clinical Urinalysis/Body Fluids, and MLT 1250 Clinical Immunology to continue in the Program. A failure (grade of "D" or "F") in any of these four first-year MLT courses will result in dismissal from the program.**

A student **may** be allowed to repeat any of the other MLT department courses **one time** if a grade lower than a "C" (76%) is received. The course may be taken a second time and must be passed, and no other MLT department course may be repeated. **Permission to repeat a course will depend on availability of an open seat in the following year when the failed course is next offered.** The student must obtain a grade of "C" (76%) or higher in the course the second time the course is taken or be dismissed from the program.

Continuation in the program course sequence following an MLT department course failure will be determined depending upon the course that is not passed (<76% or <"C") and previous coursework.

A **failing grade at the time of a drop or withdrawal** from an MLT department course will be considered to be the same circumstance as a failing grade at the completion of the course, and the consequences explained above will apply. **A student may repeat only one failed MLT department course, numbered 2000 or higher. A failure in a second MLT department course will result in dismissal from the Program. Unavailability of an open seat in the following year when the failed course is next offered will also result in dismissal from the program.**

## **CLINICAL ENTRANCE EXAMINATION**

**\*\*A Clinical Entrance Examination** is scheduled at the end of the semester before clinical rotations begin. The examination will consist of both a written and a practical portion.

- Students must pass with a minimum of 70% on each of seven sections before they are eligible to begin clinical rotations.
- Students will be allowed to repeat section(s) on which they score less than 70% one time only, **if** the following conditions are met on the first exam:
  - at least 4 of the 7 sections are passed with a score of 70% or higher AND
  - the average % score for all 7 sections is at least 62%
- Students delayed from starting their clinical rotations as scheduled will need to take the clinical entrance exam (all sections) within one month prior to starting clinical experience.

**Students failing to meet the above stated Clinical Entrance Exam criteria on the first attempt will have their clinical experience delayed by a minimum of one semester. They will be eligible to qualify for their clinical experience by retaking the exam one additional time on a regularly scheduled exam date. The exam is given at the end of fall and spring semesters. Students who meet the criteria on the first attempt will be given first priority for clinical experience placement.**

## **MLT COMPREHENSIVE EXAMINATION**

Students are required to complete an online comprehensive examination at the end of the clinical experience. The examination will include test items from all of the MLT courses, including a practical component utilizing photographs. This exam is structured similarly to the certification exam. A minimum score of 70% on each section is expected. Even though the score on this exam is not included in the grading of the clinical courses, performance on this exam is considered indicative of a student's ability to perform on a certification exam.

## **GRADUATION REQUIREMENTS**

Completion of all of the requirements for the Associate in Applied Science Degree:

- a. A student shall earn a minimum of 60 semester credits as required in the program with a grade point average of 2.00 (C) or above in courses taken at North Hennepin Community College.
- b. A student shall earn a minimum of 20 semester credits at North Hennepin Community College.
- c. A student must complete at least 50% of the professional or technical courses at North Hennepin Community College.

Completion of all MLT Program requirements:

- a. Completion of liberal arts courses, supporting sciences and math courses, and all MLT courses at a minimum of "C" level.
- b. Satisfactory achievement of essential competencies in all MLT applied (clinical) courses.
- c. Completion of the comprehensive examination, following graduation. This exam is to be considered as a practice review for the certification exam, and will be scored but not graded.
- d. Applying for, sitting for, and/or passing a National Certification Exam are **not** conditions of program completion nor graduation with this degree.

## **RE-ADMISSION TO THE MLT PROGRAM**

Any student who is unable to continue in the Medical Laboratory Technology program, defined as unable to attend classes for any one semester or summer session, should make an appointment with the MLT Program Director for an exit interview, in addition to completing the necessary processes for the College.

Re-admission to the MLT program is not automatic. Each request for re-admission is carefully evaluated.

SEE: POLICY AND PROCEDURES FOR RE-ADMISSION TO THE MLT PROGRAM (Appendix E)

Ongoing evaluation of the MLT curriculum results in semester and yearly curriculum revisions. For this reason, students who have been out of the MLT program for one calendar year or longer may be required to attend classes and/or complete laboratory units which represent new content or material which has been re-sequenced into a new semester.

Students will generally be considered for re-admission to the program only once, unless extenuating circumstances warrant a second re-admission consideration, e.g. the student becomes ill on re-admission and has to withdraw a second time.

## **POSSIBLE CAUSES FOR DISMISSAL FROM THE PROGRAM**

**Include but are not limited to: (this list may not be complete)**

- Violation of Integrity and Professionalism Policy
  - Any act of unsafe behavior
  - Absenteeism or tardiness deemed to be excessive
  - Inability to meet general course competencies
  - Failure to obtain a minimum of "C" in each course required for the Program
  - Inability to pass the clinical entrance examination after two attempts
  - Disqualification as a result of the criminal background check or urine drug screen
  - Inability to complete the clinical courses as scheduled as a result of health issues
  - Dismissal from a clinical rotation by an assigned healthcare facility for any reason
- Other issues may arise where it is deemed necessary to dismiss a student

## **OTHER INFORMATION**

### ***PROFESSIONAL LIABILITY INSURANCE***

All students enrolled in the Medical Laboratory Technician program are required to carry professional liability insurance during the clinical experience. This coverage may be obtained through a blanket policy negotiated by the State of Minnesota or independently by the individual. Students will be assessed a fee for the blanket policy for the semester of the clinical experience.

### ***ASCLS (American Society for Clinical Laboratory Science)***

#### ***ASCP (American Society for Clinical Pathology) MEMBERSHIP***

Students are strongly encouraged to join these organizations as student members. Membership includes privileges at both the national and state levels. Notices of area and regional meetings will be posted and students are invited and encouraged to attend. Information on these societies is available from the Program Director.

#### ***American Society for Clinical Laboratory Science Oath***

As a clinical laboratory professional, I acknowledge my professional responsibility to:

Maintain and promote standards of excellence in performing and advancing the art and science of my profession;  
Safeguard the dignity and privacy of patients;  
Hold my colleagues and my profession in high esteem and regard;  
Contribute to the general well-being of the community; and  
Actively demonstrate my commitment to these responsibilities throughout my professional life.

### ***PHLEBOTOMY (Blood Drawing)***

A fundamental task of a Medical Laboratory Technician is performing venipunctures. General techniques will be introduced in courses at the College, and students will be required to draw their peers and/or instructors in the classroom. Patients will not be drawn until clinical rotations. Following initial training, it takes a good deal of time to develop the skill level expected of the MLT by employers. Students will therefore perform patient phlebotomies as often as they can be scheduled to do so during clinical rotations. Students will be accompanied by an experienced staff person until objectives are achieved and independent performance can be demonstrated.

### ***STUDENT CONFERENCES***

Students will be asked to meet with the Program Director on a semester basis during the courses at NHCC. They are encouraged to meet with the individual instructors as needed throughout the courses. During the clinical rotations, there will be student/Program Director meetings scheduled as needed. A student can request a conference with an instructor or the program director at any time.

### ***REFUND POLICY***

Refund of tuition payment shall be made to a student who officially withdraws from Medical Laboratory Technician courses according to the established policies of North Hennepin Community College. Refer to the NHCC website for details.

### ***ALTERNATE LIST FOR CLINICAL EXPERIENCE PLACEMENT***

When the number of students qualified for clinical rotations exceeds the number of spots available at the clinical affiliate facilities, arrangements for an "alternate list" will be made. Ranking on the list will be determined by academic records (MLT course GPA and overall GPA), financial need, and clinical site preference. The students will be notified fall semester of the second year if this situation is anticipated. As spots become available, students on the "alternate list" will be given preference to progress to clinical assignments. Those on the alternate list will be scheduled to complete the MLT Applied courses within the span of two semesters as much as possible.

A signature form is required that indicates the student has a full understanding of the conditions for completion and alternate status.

**CERTIFICATION EXAMINATION**

Specific information regarding the certification examination will be available during clinical experience at one of the site visits with the Program Director. In general, application to sit for the Board of Certification (BOC-ASCP) examination should be made in mid-April if possible. The three month period of June 1- August 31 is the usual testing period timeframe for NHCC MLT program students completing Spring semester rotations. Registration fee is currently \$215. This is a computer exam, administered by a testing center, and contains approximately 100 - 150 questions.

Passing this exam is not a requirement for obtaining the MLT A.A.S. degree, however inability to pass this exam may result in inability to obtain, or maintain, employment.

**Students are highly encouraged to sit for the certification exam within one to three months of program completion.**

**ADDITIONAL EXPENSES**

**Immunizations/Tuberculosis test/Physical Exam**

Most insurance companies cover costs

County of residence may provide immunizations at low/no cost

**APPROX. COST**

varies

**Liability Insurance**

Assessed automatically by NHCC for the clinical semester

approx. \$25

**Certification Examination Fee (ASCP – BOC)**

\$200

**Parking fees during clinical experience**

Charges range from no charge to \$2.50-\$5.00 per day

varies by site

## GRIEVANCE PROCEDURE

The student has the right to see all of his/her grades and evaluations, and also has the right to disagree with an instructor's perceptions or judgments. He/she may request a conference with an instructor to discuss these or any other related concerns.

### STUDENT PROTOCOL: DISCUSSION OF PROBLEMS/CONCERNS WITH FACULTY

If a problem arises, it is expected that:

1. The student/Instructor would approach the Instructor/student first to rectify the situation.
2. If that does not resolve the issue, the student/Instructor should inform the Program Director.
3. The Dean of Allied Health Careers will be informed of the issues involved.
4. The student/Instructor has the option of initiating an Appeals Committee meeting. (see procedure below)
5. There is also a specific grievance procedure available through the College; refer to the NHCC Student Handbook (available at the Campus Center desk).

### INITIATING AN APPEALS COMMITTEE MEETING

1. The Instructor/student initiating the meeting notifies the Program Director.  
The committee members include:
  - two volunteer students (preferably one from each class)
  - three volunteer MLT program faculty members
  - the MLT Program Director
  - the North Hennepin Community College Dean of Health Careers
2. Prior to the meeting, the Instructor/student will provide information to the committee regarding the ineffective behavior and other related material. The student may present any written material that may be significant for review.
3. A committee member notifies the student as to the time and place of the meeting. Review will occur within 48 hours of the request if possible.
4. The student/Instructor has the option to be present at the meeting during the presentation of the situation.
5. Written records will be kept of the meeting. In addition, a tape recording may be taken with the individuals' permission.
6. The committee will discuss the situation and make a decision as to the course of action. If the recommended action is for dismissal from the program, the situation will be presented for approval of the entire faculty.
7. The student will be notified of the committee's decision within 24 hours if possible.

### APPEALS COMMITTEE OPTIONS RELATED TO INEFFECTIVE BEHAVIOR

#### Warning Letter

This is to inform a student that their status (academic or nonacademic) in the MLT program has reached a point where change is imperative to avoid placement on continuation contract status. The student will sign the warning letter, and it becomes a part of the student's file. The student will receive a copy of the signed letter.

Situations where a warning letter would be appropriate:

1. when the same type of ineffective behavior is documented more than once
2. when different ineffective behaviors are documented
3. when academic progress is in danger

#### Continuation Contract

This is to inform a student that their continuation in the MLT program is in jeopardy. The contract should be set-up by the instructor, the MLT Program Director, and the Dean. It will consist of a specified plan of action and timeframe for improving behavior. The student and the MLT Program Director will sign the contract, and it becomes a part of the student's file. The student and the instructor(s) who will be working with the student during the timeframe of the contract will each receive a copy of the signed contract.

Situations where a continuation contract would be appropriate:

1. when an Instructor makes a recommendation to the Appeals Committee based on past and/or present ineffective behavior
2. when health care facility staff have identified and documented grave concerns regarding a student's clinical performance
3. when the affiliated agency refuses to allow a student to perform in the clinical area
4. when faculty as a group have concerns regarding a student's suitability for MLT

**Unusual Incident**

If a single ineffective behavior is of such magnitude that dismissal from the program is considered, the warning letter and continuation contract would not apply. This situation would be taken directly to the Appeals Committee for recommendation to the faculty for a final decision. Any student dismissed from the MLT program by faculty action, with the exceptions of dishonesty and failure to adhere to safety standards, can request re-admission consideration by following the general policies stated for re-admission by the MLT program.





## **APPENDIX A**

### **STUDENT ABSENCE/TARDINESS REPORT**



**NORTH HENNEPIN COMMUNITY COLLEGE  
MEDICAL LABORATORY TECHNOLOGY PROGRAM  
STUDENT ABSENCE/TARDINESS REPORT**

Student \_\_\_\_\_ Date \_\_\_\_\_

Course \_\_\_\_\_ Start time \_\_\_\_\_

Time called in and/or arrived \_\_\_\_\_

Explanation \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Course Instructor \_\_\_\_\_

Program Director \_\_\_\_\_

Documentation required?      Yes \_\_\_\_\_      No \_\_\_\_\_

Excused absence?              Yes \_\_\_\_\_      No \_\_\_\_\_      NA \_\_\_\_\_

Excused lateness?            Yes \_\_\_\_\_      No \_\_\_\_\_      NA \_\_\_\_\_

Examination missed?        Yes \_\_\_\_\_      No \_\_\_\_\_

\*\*\*\*\*

**PRIOR PERMISSION**

Requested Absence - Date(s) \_\_\_\_\_

Reason for Absence: \_\_\_\_\_

Approved?                      Yes \_\_\_\_\_      No \_\_\_\_\_

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Program Director \_\_\_\_\_ Date \_\_\_\_\_

Reason if Unapproved \_\_\_\_\_

\_\_\_\_\_

\*\*\*\*\*

**Makeup Work - Schedule**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Student signature \_\_\_\_\_ Date \_\_\_\_\_

2009



## **APPENDIX B**

### **RECORD OF INEFFECTIVE BEHAVIOR**



## **RECORD OF INEFFECTIVE BEHAVIOR (ROIB)**

The purpose of the ROIB is to document identified student behavior that may hinder maximum professional growth and competence objectively and clearly. Faculty believes that students can benefit from immediate feedback related to performance. The ROIB can provide this feedback, plus the opportunity to document data and perceptions so that student and instructor may discuss the behavior. Faculty hopes this record can be the springboard for change and improvement in performance. The record remains in the student file.

### **DEFINITIONS:**

Behavior: affective, cognitive, or psychomotor performance

Ineffective Behavior: performance that the Instructor judges to be unsatisfactory, inconsistent, or non-compliant as related to program policies, course requirements, and/or clinical competencies

Examples of ineffective behaviors include but are not limited to:

- any breach of integrity or honesty
- discussion of patient data in a public area
- failure to follow Standard Precautions or safety procedures
- failure to obtain supervision from an instructor when necessary
- use of language and mannerisms that are offensive to patients and others in the clinical area
- failure to notify instructors in case of illness or anticipated tardiness
- unexcused absences

### **PROCEDURE FOR IMPLEMENTATION OF THE RECORD OF INEFFECTIVE BEHAVIOR**

1. The instructor immediately notifies the student of an ineffective behavior.
2. The student is informed of the significance of that behavior.
3. The instructor decides immediately if the student is permitted to remain in the classroom or clinical area.
4. If the student is dismissed, a conference must occur before the student is permitted to return to the classroom or clinical area.
5. A ROIB will be completed whenever a student's performance is deemed ineffective.
6. The ROIB will be read by the student and discussed with the instructor.
7. The student and the instructor will sign the ROIB.
8. A copy will be given/sent to the Program Director and it will be placed in the student's file.
9. The instructor or Program Director will initiate a review regarding the following situations:
  - a. occurrence of a second incident in the same academic semester.
  - b. occurrence of a similar incident, as already documented, in any later semester.

**NORTH HENNEPIN COMMUNITY COLLEGE  
MEDICAL LABORATORY TECHNOLOGY PROGRAM  
RECORD OF INEFFECTIVE BEHAVIOR**

Student \_\_\_\_\_ Date \_\_\_\_\_

Course \_\_\_\_\_

Course Instructor \_\_\_\_\_

Program Director \_\_\_\_\_

**Ineffective Behavior(s):**

**Factual Description by Faculty of Ineffective Behavior:**

**Faculty Signature** \_\_\_\_\_

\*\*\*\*\*

**Student Response:**

**I have read this record and discussed it with my instructor.**

**Student Signature** \_\_\_\_\_

8/2003

## **APPENDIX C**

# **IMMUNIZATION RECORD AND PHYSICAL EXAMINATION FORMS**



**NORTH HENNEPIN COMMUNITY COLLEGE**

**MEDICAL LABORATORY TECHNOLOGY AND HISTOTECHNOLOGY PROGRAM  
Hepatitis Immunization Record**

All students in these programs are expected to make arrangements as necessary for the required attestation of immunization **BEFORE** beginning MLT or HT courses.

Student \_\_\_\_\_ Date \_\_\_\_\_

**Clinician - please print or stamp the following:**

Clinician name \_\_\_\_\_ Facility \_\_\_\_\_

**Required Documentation:**

<b>Hepatitis B - documentation of immunity status REQUIRED</b>		Date(s) for one method
1 History of disease		_____
2 Positive serology test		_____
3 HB vaccine	1st dose	1 _____
	2nd dose	2 _____
	3rd dose	3 _____
4 Signed waiver declining vaccination		_____

**Clinician - please sign:**

I have verified immunization status for the student named above.

\_\_\_\_\_  
Signature of clinician

\_\_\_\_\_  
Date



**NORTH HENNEPIN COMMUNITY COLLEGE  
HISTOTECHNOLOGY or MEDICAL LABORATORY TECHNOLOGY PROGRAM  
Clinical Experience Immunization Record**

All students in these programs are expected to make arrangements as necessary for the required attestation of immunization and physical examination **BEFORE** experience in a health care facility begins.

Student \_\_\_\_\_ Date \_\_\_\_\_

**Clinician - please print or stamp the following:**

Clinician name \_\_\_\_\_ Facility \_\_\_\_\_

**Required Documentation:**

<p><b><u>Tuberculosis Testing</u></b> (within previous 6 months before starting clinicals) TST or QFT Result* (pos or neg):</p> <hr/> <p>*If positive, evidence of a negative CXR. Provider <u>must</u> attest that student shows no signs/symptoms of active TB.</p> <p>Provider signature:</p> <hr/>	<p>Test date</p> <hr/> <hr/> <hr/>
<p><b><u>Varicella (Chicken Pox) - documentation of immunity REQUIRED</u></b></p> <p>1 Reliable history of VZV or shingles</p> <hr/> <p>2 Positive serology test</p> <hr/> <p>3 Two doses of vaccine</p> <p style="text-align: right;">1st dose</p> <hr/> <p style="text-align: right;">2nd dose</p> <hr/>	<p>Date(s) for one method</p> <hr/> <hr/> <p>1</p> <hr/> <p>2</p> <hr/>
<p><b><u>Mumps - documentation of immunity REQUIRED</u></b></p> <p>1 Born before 1957</p> <hr/> <p>2 MD diagnosed mumps</p> <hr/> <p>3 Two doses of M or MMR</p> <p style="text-align: right;">1st dose</p> <hr/> <p style="text-align: right;">2nd dose</p> <hr/> <p>4 Positive serology</p> <hr/>	<p>Date(s) for one method DOB</p> <hr/> <hr/> <p>1</p> <hr/> <p>2</p> <hr/>
<p><b><u>Rubella (German Measles) - documentation of immunity REQUIRED</u></b></p> <p>1 One dose of MR or MMR</p> <hr/> <p>2 Positive serology test</p> <hr/>	<p>Date for one method</p> <hr/> <hr/>

**Required Documentation:**

<b>Rubeola (Red Measles) - documentation of immunity REQUIRED</b>		Date(s) for one method
1 Born before 1957		DOB
Reliable history or MD diagnosed mumps		_____
Positive serology test		_____
One dose vaccine		_____
2 Born in or after 1957		DOB
MD diagnosed		_____
measles		_____
Two doses vaccine	1st dose	1 _____
	2nd dose	2 _____
		_____
Positive serology		_____
<b>Hepatitis B - documentation of immunity status REQUIRED</b>		Date(s) for one method
1 History of disease		_____
2 Positive serology test		_____
3 HB vaccine	1st dose	1 _____
	2nd dose	2 _____
	3rd dose	3 _____
4 Signed waiver declining vaccination		_____
<b>Pertussis (Tdap) - documentation of vaccination REQUIRED</b>		
One dose of adult Tdap		_____
<b>Influenza - documentation of vaccination REQUIRED</b>		
Annual vaccination(s)		_____

**Clinician - please sign:**

I have verified immunization status for the student named above.

\_\_\_\_\_  
Signature of clinician

\_\_\_\_\_  
Date

**NORTH HENNEPIN COMMUNITY COLLEGE  
HISTOTECHNOLOGY or MEDICAL LABORATORY TECHNOLOGY PROGRAM  
Physical Examination**

All students in these programs are expected to arrange appointments as necessary for the required attestation of immunization and physical examination **BEFORE** experience in a health care facility begins.  
HT - sessions at Allina Central Laboratory in Minneapolis usually begin in January of the first year.  
MLT - clinical rotations usually begin in January (spring semester) of the second year.

Student \_\_\_\_\_ Date \_\_\_\_\_

**PHYSICAL EXAMINATION**

**Clinician - please print or stamp the following:**

Clinician name \_\_\_\_\_ Facility \_\_\_\_\_

**Clinician - please sign:**

I have examined the student named above and determined that he/she has no active contagious / communicable disease.

\_\_\_\_\_  
Signature of clinician

\_\_\_\_\_  
Date

**Clinician - please sign either statement 1 or 2:**

1. The student is able to perform the attached Essential Functions **without restrictions.**

\_\_\_\_\_  
Signature of clinician

\_\_\_\_\_  
Date

2. The student is able to perform the attached Essential Functions **with the following restrictions:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature of clinician

\_\_\_\_\_  
Date



## Medical Laboratory Technology Program

### ESSENTIAL FUNCTIONS

Essential functions represent the essential nonacademic requirements of the program that a student must be able to master to become employable. Examples of this program's essential functions are provided below. The National Accrediting Agency for Clinical Laboratory Science, in compliance with the Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973, requires us to define and publish essential functions. *If you are not sure that you will be able to meet these essential functions please consult with the MLT Program Director for further information and to discuss your individual situation.* If restrictions are necessary due to a disability, reasonable accommodations will be made. To receive accommodations, the student must contact Disabilities Access Services at 763-493-0555 (V) or 763-493-0558 (TTY).

**KEY:** **Rare** = Less than once or twice a week  
**Occasional** = 0 - 2.5 hours per day  
**Frequent** = Total of 2.5 - 5.5 hours per day  
**Constant** = > 5.5 hours per day

#### Vision

- Near Vision - Reading 20 inches or less - Constant
  - \* Reading of procedures
  - \* Digital printouts, etc.
  - \* Gradation on syringes and pipettes
  - \* Computer terminals
- Depth Perception - Constant
- Color Vision - Constant
- Far Vision (>20 feet) - Occasional
- Detail Perception - Frequent
  - \* Visual comparisons and discriminations
  - \* Differences in shapes and shadings of figures

#### Hearing and Verbal Communication

- Direct communication - Frequent
- Telephone communication - Occasional
- Hear and locate timers/alarms - Occasional

#### Large Motor Skills

- Standing - Frequent
- Sitting - Frequent
- Static Neck Position - Frequent
- Walking - Occasional
- Climbing Stairs - Occasional
- Pushing/Pulling - Occasional
- Stooping/Bending - Occasional
- Reaching - Occasional

#### Small Motor/Manipulative Skills

- Hand/Arm Control - Frequent
- Fingering - Frequent
  - \* Fine Manipulation
  - \* Writing
  - \* Keying/Typing
- Simple Grasping - Frequent

#### Strength

- Lifting/carrying up to 10 pounds - Occasional

#### Computational Skills

- Metric Conversions - Occasional
- Algebraic Problem Solving - Occasional

#### Attentiveness

- Maintain Alertness - Constant
- Maintain Concentration - Constant

**Memory Skills**

- Short Term Memory - Constant
- Long Term Memory - Constant

**Reasoning Skills**

- Transfer Knowledge - Frequent
- Process Information - Frequent
- Problem Solving - Frequent
- Prioritize Tasks - Frequent
- Evaluate Outcomes - Frequent
- Comprehension - Frequent

**Emotional Stability**

- Responsibility - Constant
- Adaptability - Frequent
- Accountability - Constant
- Appropriate Response - Constant

**Possible Exposure**

- Radiation - Rare  
(dependent upon type of procedures; may be zero)
- Toxic/caustic chemicals - Rare  
(dependent upon type of procedures; may be zero)
- Fumes/Odors - Rare
  - \* Noxious smells from various types of body fluids/excretions
- Mutagenic/Carcinogenic materials - Rare  
(dependent upon type of procedures; may be zero)
- Blood/Body Fluid Pathogens
  - \* Standard Precautions are incorporated into everything laboratory personnel do to eliminate exposure.
- Airborne Pathogens - Rare
- Noise - Constant

**Occupational Factors**

The positions available in the field of medical laboratory technology may require all or combinations of the following.

- Appearance/Hygiene Policies
- Possible Shift Work
- Customer/Public Interactions
- Working Under Specific Instructions
- Evaluating Performance of Others
- Performing Multiple Tasks Concurrently
- Working Alone or Apart, in Physical Isolation from Others
- Working Under Time Constraints
- Team Work
- Dealing with the Unexpected
- Handling Stressful or Emotional Situations

## **APPENDIX D**

### **PSYCHOMOTOR AND AFFECTIVE EVALUATION FORM EXAMPLES (actual forms used may vary)**



**NORTH HENNEPIN COMMUNITY COLLEGE**  
**MLT 2080 CLINICAL MICROBIOLOGY**  
**LABORATORY PSYCHOMOTOR EVALUATION – Lab 1**

<b>TIME MANAGEMENT (2)</b>	(0) Did not complete >2 Gram stains		(1) Did not complete 1-2 Gram stains		(2) Completed all Gram stains	
Finished work in allotted time.						
<b>TECHNIQUE (12)</b>	(0) Unsatisfactory even after reminders/ assistance		(1) Satisfactory with reminders/assistance		(2) Completed independently	
Used aseptic technique						
Put at least 4 Gram stains on a single slide						
Heat fixed slide						
Followed Gram stain procedure						
Stains were properly decolorized						
Independently focused microscope on 100x						
<b>INTERPRETATION (10)</b>	(1) >3 Mistakes	(2) 3 Mistakes	(3) 2 Mistakes	(4) 1 Mistake	(5) All correct	
Morphology (bacilli vs. cocci) interpreted correctly						
Reaction (positive vs. negative) interpreted correctly						
<b>DOCUMENTATION (4)</b>	(0) Unsatisfactory			(1) Satisfactory		
Positive and negative spelled out rather than symbols						
Slides labeled						
Reaction and morphology included on all completed Gram stains						
Mistakes corrected appropriately						
<b>INDEPENDENCE (3)</b>	(1) Below Average		(2) Average		(3) Above Average	
Worked independently and referenced procedures rather than instructor when appropriate						
<b>SAFETY (4)</b>	(0) Unsatisfactory			(1) Satisfactory		
PPE worn when appropriate						
Hands washed						
Lab bench disinfected						
Disposed of biohazardous waste appropriately						
<b>DISCUSSION (5)</b>	(1) Below Average		(3) Average		(5) Above Average	
Discussion questions completed and correct						



### NORTH HENNEPIN COMMUNITY COLLEGE MLT AFFECTIVE EVALUATION

Results of the Affective Evaluation will comprise 5% of the student’s final grade for each course. The evaluation will be completed several times throughout the semester and feedback will be provided to the student after each evaluation. Students will have the opportunity to improve their rating throughout the semester with a final evaluation being completed after the course is finished.

**Ratings:**

- 1** = Needs improvement. / Student is not performing as would be expected for an entry-level clinical rotation student.
  - 2, 3, 4** = Meets Expectations. / Student is currently performing as would be expected for an entry-level clinical rotation student to varying degrees.
  - 5** = Exceptional. / Student’s performance is well above what would be expected of an entry-level rotation student.
- Comments are required for rating of 1 and 5. Comments should give specific examples of occurrences/situations that illustrate why rating is being assigned.
  - A rating of 1 will result in the implementation of a Performance Improvement Plan.

**Grading Scheme:**

Approximate translation of numeric rating to letter grade: 4 & 5 = A; 3 = B, 2 = C, 1 = F  
Rating for items 1-8 will be added for a total score. See chart below for score translation to percentage points.\*

Score	Percent	Letter Grade
36	100%	A
35	99%	A
34	98%	A
33	97%	A
32	96%	A
31	94%	A
30	92%	A
29	90%	B
28	88%	B
27	87%	B
26	86%	B

Score	Percent	Letter Grade
25	85%	B
24	84%	B
23	83%	C
22	82%	C
21	81%	C
20	80%	C
19	79%	C
18	78%	C
17	77%	C
16	76%	C
≤15	≤75%	D or F

\*Students who receive a final score of 1 in the Integrity category can receive a final score no higher than 15 regardless of their performance in the remaining seven categories.



4. Responsibility	Does not accept responsibility for own work/mistakes. Cannot accept being wrong. Offers excuses or deflects blame to others.	Accepts responsibility for own work/mistakes. Acknowledges errors and learns from them. Accepts constructive criticism of skills and behavior and uses critique for improvement.	
-------------------	--	--	--

**1**

**2**

**3**

**4**

**N/A**

5. Interpersonal/ Communication Skills	Unable to clearly convey ideas verbally or in writing. Emails do not use a professional communication style. Dismissive or patronizing toward instructors or other students. Communicates in a confrontational rather than conversational manner. Brings cold or negative atmosphere to class.	Effectively conveys and receives ideas; responds appropriately. Emails use a professional communication style. Is respectful of instructors' knowledge, skills, and experience. Interactive. Communicates in a positive manner with instructors and other students. Contributes to a positive classroom environment.	
--	--	--	--

**1**

**2**

**3**

**4**

**N/A**

6. Ability to Handle Stress	Seems tired frequently. Frustrates easily. Has difficulty coping with speed of work, people, and/or environment. Has difficulty adjusting to variations or changes.	Alert and interactive. Can "go with the flow." Performs well in busy classroom environment. Deals well with variety of personalities. Demonstrates patience with instructors and coworkers. Demonstrates flexibility and ability to adapt to change.	Demonstrated calmness or flexibility in an unusual situation.
-----------------------------	---	--	---

**1**

**2**

**3**

**4**

**5**



## **APPENDIX E**

### **POLICY AND PROCEDURES FOR RE-ADMISSION TO THE MLT PROGRAM**

#### **RE-ADMISSION REQUEST FORM**



**NORTH HENNEPIN COMMUNITY COLLEGE  
MEDICAL LABORATORY TECHNOLOGY  
POLICY AND PROCEDURES FOR RE-ADMISSION TO THE PROGRAM**

**General Policies Regarding Re-admission to the MLT Program**

1. Any student who is unable to continue in the Medical Laboratory Technician program, defined as unable to attend classes for any one semester or summer session, should make an appointment with the MLT Program Director for an exit interview in addition to completing the necessary processes for the College.
2. Re-admission to the MLT program is not automatic. Each request for re-admission will be carefully evaluated by the MLT faculty.
3. Any student desiring consideration for re-admission must follow the Re-admission Procedures.
4. Ongoing evaluation of the MLT curriculum results in semester and yearly curriculum revisions. Due to this fact, students who have been out of the MLT program for longer than one calendar year may be required to attend classes and/or complete laboratory units which present new content or material which has been re-sequenced into a new semester.
5. Students will generally be considered for re-admission to the program only once, unless extenuating circumstances warrant a second re-admission consideration, e.g. student becomes ill on re-admission and has to withdraw from program.

**RE-ADMISSION PROCEDURE**

A Re-admission Request Form may be obtained from the MLT Program Director.

1. A STUDENT REQUESTING REVIEW FOR RE-ADMISSION TO THE MLT PROGRAM WILL:
  - a. submit a complete copy of the Re-admission Request Form to the MLT Program Director for review by the instructors and Program Director.
  - b. submit this request to the MLT Program Director no later than one month prior to the start date of the semester for which the students wants to be re-admitted.
  - c. provide transcripts and other data (health statements, etc.) to verify any statements made in re-admission request.
2. CONSIDERATION FOR RE-ADMISSION WILL BE BASED UPON:
  - a. overall College GPA - 2.0 minimum, 2.5 preferred.
  - b. at least a "C" in each general education math and science course in the MLT curriculum.
  - c. all courses completed at a level of "C" or better since leaving program.
  - d. completion of prerequisite courses necessary for re-entering during the requested semester.
  - e. achievement and evaluations in completed MLT courses.
  - f. evidence of resolution of sources cited as reasons for leaving MLT program.
  - g. course load at the time of leaving the program.
  - h. course load to be carried, if re-admitted.
  - i. work load - hours/week - in past when in program and if re-admitted.
  - j. space availability in MLT program.
3. THE DECISION BY THE FACULTY ON THE REQUEST FOR RE-ADMISSION WILL BE COMMUNICATED IN WRITING VIA MAIL AND EMAIL.
4. A STUDENT WHO IS APPROVED FOR RE-ADMISSION TO THE MLT PROGRAM WILL:
  - a. fulfill all conditions of re-admission before registration for MLT is allowed.

\*Specified testing in theory or laboratory skill performance may be required of individuals based on review of their performance while in the MLT program.





RE-ADMISSION REQUEST FORM (page 2)

DATA SINCE LEAVING MLT PROGRAM:

1. Course work completed - with grades.

2. Work load - hours/week at present.

RATIONALE FOR DESIRING RE-ADMISSION. Based on reasons for leaving program, why should you be allowed to re-enter at this time? State if any contributing pressures have been resolved or have changed.

DATA ON COURSE WORK TO BE COMPLETED:

1. Courses in the MLT Curriculum in addition to MLT courses yet to be completed are:

2. Work load to be carried if re-admitted - hours/week. Is it a necessity that you work?

## **APPENDIX F**

### **POTENTIAL APPLIED CLINICAL SITES ALLINA HEALTH LABORATORY**



### Allina Health Laboratory Potential Clinical Sites

#### Allina Hospitals

<b>Abbott Northwestern Hospital</b> 800 East 28th Street Minneapolis, MN 55407	<b>Owatonna Hospital</b> 2250 NW 26th Street Owatonna, MN 55060
<b>Buffalo Hospital</b> 303 Catlin Street Buffalo, MN 55313	<b>St. Francis Regional Medical Center</b> 1455 St. Francis Avenue Shakopee, MN 55379
<b>Cambridge Medical Center</b> 701 South Dellwood Street Cambridge, MN 55008	<b>United Hospital</b> 333 North Smith Avenue St. Paul, MN 55102
<b>Mercy Hospital</b> 4050 Coon Rapids Blvd. Coon Rapids, MN 55433	<b>Unity Hospital</b> 550 Osborne Road Fridley, MN 55432
<b>New Ulm Medical Center</b> 1324 Fifth North Street New Ulm, MN 56073	

#### Allina Clinics

<b>Aspen Medical Group - Bandana Square</b> 1020 Bandana Boulevard West St. Paul, MN 55108	<b>AMC - Hastings (First Street)</b> 1210 West First Street Hastings, MN 55033
<b>AMC - Buffalo</b> 303 Catlin Street Buffalo, MN 55313	<b>AMC - Maple Grove</b> 7840 Vinewood Lane Maple Grove, MN 55369-4655
<b>AMC - Champlin</b> 11269 Jefferson Highway Champlin, MN 55316-3199	<b>AMC - Nicollet Mall</b> 825 Nicollet Mall Medical Arts Bldg, Suite 300 Minneapolis, MN 55402
<b>AMC - Coon Rapids</b> 9055 Springbrook Drive Coon Rapids, MN 55433-5841	<b>AMC - Northfield</b> 1400 Jefferson Road Northfield, MN 55057
<b>AMC - Cottage Grove</b> 8611 West Point Douglas Road S Cottage Grove, MN 55016	<b>AMC - Ramsey</b> 7231 Sunwood Drive NW Ramsey, MN 55303-4250
<b>AMC - Eagan</b> 1110 Yankee Doodle Road Eagan, MN 55121	<b>AMC - Shakopee</b> 1601 St. Francis Avenue Shakopee, MN 55379
<b>AMC - Edina</b> 7500 France Avenue South Edina, MN 55435	<b>AMC - Shoreview</b> 4194 North Lexington Avenue Shoreview, MN 55126
<b>AMC - Elk River</b> 14181 Business Center Drive NW Elk Ridge Health Elk River, MN 55330	<b>AMC - United Medical Specialties (UMS) St. Paul</b> 255 North Smith Avenue John Nasseff Medical Center, Suite 100 St. Paul, MN 55102
<b>AMC - Faribault</b> 100 State Avenue Faribault, MN 55021-5406	<b>AMC - West St. Paul</b> 150 East Emerson Avenue W. St. Paul, MN 55118
<b>AMC - Farmington</b> 21260 Chippendale Avenue Farmington, MN 55024	<b>AMC - Woodbury</b> 8675 Valley Creek Road Woodbury, MN 5525
<b>AMC - Forest Lake</b> 1540 South Lake Street Forest Lake, MN 55025	<b>AMC - Woodlake</b> 407 West 66 <sup>th</sup> Street Richfield, MN 55423



## **APPENDIX G**

### **MLT PROGRAM INFORMATION SHEET**



## MEDICAL LABORATORY TECHNOLOGY (MLT) ASSOCIATE OF APPLIED SCIENCE

### PURPOSE:

This program prepares graduates to work as members of the health care team in performing laboratory procedures that aid the physician in diagnosis and treatment of disease.

### BEFORE YOU APPLY - PREREQUISITES FOR ADMISSION TO THE PROGRAM:

1. TEAS V Test – All applicants are required to take the Assessment Technologies Institute (ATI) standardized Test of Essential Academic Skills (TEAS) prior to the application deadline and meet minimum scores as specified on the MLT Program website.
2. Minimum GPA: 2.80; If no college courses are completed at time of application, minimum high school GPA must be 2.80.
3. Applicants must have completed at minimum a full year of high school chemistry in the United States with a straight grade of “C” or higher OR a college level Introduction to Chemistry (NHCC Chem 1010) with a straight grade of “C” or higher.
4. All applicant must complete a college level writing course (NHCC Engl 1201) and college algebra (NHCC Math 1150) with a minimum grades of “C” prior to beginning the MLT Program. Admission will be contingent upon successful completion.

### CURRICULUM:

Course	Title	Credits	Course Prerequisite (all grades “C” or better)
<b>General Education Courses</b>			
Biol 1001	Biology I (Goal Area 3)	4	
Biol 1120	Human Biology (Goal Area 3)	3	
Chem 1061	Principles of Chemistry I (Goal Area 3)	4	Math 1150
Chem 1062	Principles of Chemistry II (Goal Area 3)	4	Chem 1061
Engl 1201	College Writing I (Goal Area 1)	4	Engl 0950 OR placement
Math 1150	College Algebra (Goal Area 4)	3	Math 0902 or 0903 OR placement
Phil 1020	Ethics (Goal Areas 6 and 9)	3	
Spch 1110	Principles of Interpers. Comm. (Goal Area 1)	<u>3</u>	
		28	
<b>MLT Department Didactic Courses</b>			
<b>(all grades “C” or better)</b>			
MLT 1000	Clinical Laboratory Basics	1	admission into the MLT program
MLT 1200	Clinical Laboratory Instrumentation	1	admission into the MLT program
MLT 1100	Clinical Urinalysis/Body Fluids	2	MLT 1000; Biol 1001; Biol 1120
MLT 1250	Clinical Immunology	2	MLT 1000
MLT 2080	Clinical Microbiology	4	Biol 1001
MLT 2050	Clinical Hematology	4	MLT 1000, 1100, 1200, 1250
MLT 2100	Clinical Chemistry	4	MLT 1000, 1200 and Chem 1062
MLT 2150	Clinical Immunohematology	<u>3</u>	MLT 1250 and MLT 2050
		21	
<b>MLT Department Clinical Courses</b>			
<b>(all didactic courses)</b>			
MLT 2310	Applied Phlebotomy	1	
MLT 2320	Applied Hematology	2	
MLT 2330	Applied Coagulation	1	
MLT 2340	Applied Urinalysis	1	
MLT 2350	Applied Microbiology	2	
MLT 2360	Applied Immunohematology	2	
MLT 2380	Applied Chemistry	<u>2</u>	
		11	
	<b>TOTAL PROGRAM CREDITS</b>	<b>60</b>	

## Full-Time, Two-Year Curriculum and Suggested Sequence

### Day Option

1 <sup>st</sup> Year*	2 <sup>nd</sup> Year
<p><u>Summer 7 credits</u> Engl 1201 College Writing I **Math 1150 College Algebra</p> <p><u>Fall 15 credits</u> Biol 1001 Biology I **Chem 1061 Principles of Chemistry I MLT 1000 Clinical Laboratory Basics MLT 1200 Clinical Laboratory Instruments MLT 1100 Clinical Urinalysis/Body Fluids Biol 1120 Human Biology</p> <p><u>Spring 13 credits</u> **Chem 1062 Principles of Chemistry II MLT 1250 Clinical Immunology MLT 2050 Clinical Hematology Spch 1110 Principles of Interpersonal Communication</p>	<p><u>Summer 8 credits</u> MLT 2080 Clinical Microbiology</p> <p><u>Fall 10 credits</u> MLT 2100 Clinical Chemistry MLT 2150 Clinical Immunohematology Phil 1020 Ethics</p> <p><u>Spring 11 credits</u> Clinical rotations in a medical lab which encompass: MLT 2310 Applied Phlebotomy MLT 2320 Applied Hematology MLT 2330 Applied Coagulation MLT 2340 Applied Urinalysis MLT 2350 Applied Microbiology MLT 2360 Applied Immunohematology MLT 2380 Applied Chemistry</p>

### Evening Option

1 <sup>st</sup> Year*	2 <sup>nd</sup> Year
<p><u>Summer 7 credits</u> Engl 1201 College Writing I **Math 1150 College Algebra</p> <p><u>Fall 15 credits</u> Biol 1001 Biology I Biol 1120 Human Biology **Chem 1061 Principles of Chemistry I MLT 1000 Clinical Laboratory Basics MLT 1200 Clinical Laboratory Instruments MLT 1100 Clinical Urinalysis/Body Fluids</p> <p><u>Spring 13 credits</u> **Chem 1062 Principles of Chemistry II MLT 1250 Clinical Immunology MLT 2050 Clinical Hematology Spch 1110 Principles of Interpersonal Communication</p>	<p><u>Summer 8 credits</u> MLT 2080 Clinical Microbiology</p> <p><u>Fall 10 credits</u> MLT 2100 Clinical Chemistry MLT 2150 Clinical Immunohematology Phil 1020 Ethics</p> <p><u>Spring 11 credits</u> <b>Clinical rotations in a medical lab on the day shift (<i>clinical rotations are not available evenings</i>)</b> which encompass: MLT 2310 Applied Phlebotomy MLT 2320 Applied Hematology MLT 2330 Applied Coagulation MLT 2340 Applied Urinalysis MLT 2350 Applied Microbiology MLT 2360 Applied Immunohematology MLT 2380 Applied Chemistry</p>

**\*\*Required course sequence to complete the program in 2 years if none of these general education courses are completed prior to entering the MLT program.**

**Developmental Courses:** Some students may need preparatory course(s) based on college placement testing in the areas of ESOL, Academic Development, English or Math. Courses numbered below 1000 will not apply toward the AAS degree.

*This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS); 5600 N. River Road, Suite 720, Rosemont, IL 60018; 773-714-8880*

## **APPENDIX H**

### **STUDENT POLICY MANUAL ACKNOWLEDGMENT and STUDENT ALTERNATE LIST ACKNOWLEDGMENT FORM**



**NORTH HENNEPIN COMMUNITY COLLEGE  
MEDICAL LABORATORY TECHNOLOGY  
ACKNOWLEDGMENT FORM**

**Student Name** \_\_\_\_\_  
Please Print

**ID#** \_\_\_\_\_

**Student Policy Manual Acknowledgment**

I hereby acknowledge that I have received a copy of the MLT Student Policy Manual. I certify that I will read the document carefully and will comply with the policies of the program as stated herein.

**I recognize I need to retain the manual until I have completed all of my course work.**

**I agree to accept the consequences of non-compliance with any policies stated herein.**

If I have questions, I will contact the MLT Program Director or Dean of Health Careers for clarification.

(Statement is to be signed during the MLT program orientation prior to beginning MLT program courses, or upon entering the program at a later date).

**Student signature** \_\_\_\_\_

**Date** \_\_\_\_\_

**Student Alternate List Acknowledgment**

I hereby acknowledge that I have been informed that an alternate list may be instituted if clinical sites are not available at the time I am ready to begin that portion of the MLT program. I understand that I will be informed during the term prior to my clinical rotation and that I will be given priority to the next available site as my ranking indicates, as described in this manual.

**Student signature** \_\_\_\_\_

**Date** \_\_\_\_\_

