



**Luverne Educational Center for Health Careers**

**311 North Spring Street  
Luverne, MN 56156**

# **Medical Laboratory Technician**

**Orientation and Handbook**

**2022/2023**

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We are so excited that you chose the Medical Laboratory Technician field for your career. The MLT Program is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS). Accreditation of an educational program for health professionals indicates the quality of the program. If you would like more information about NAACLS, you can contact:



5600 N. Rive Rd.  
Suite 720  
Rosemont, IL 60631  
1-773-714-8880 fax: 773-714-8886  
[www.naacls.org](http://www.naacls.org)

Minnesota West received its initial accreditation in 1996 from the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Ten years of continuing accreditation was awarded in 2016.

Dr. Rita Miller is the Program Director/Instructor for the MLT and Phlebotomy programs. Rita received her Doctorate degree in Higher Education Administration from St. Cloud State University in December 2012. She received her Masters of Science in Medical Laboratory Science from the University of North Dakota in Grand Forks, ND. She received her Bachelor of Science Degree in Microbiology and Minor in Chemistry from South Dakota State University in Brookings, SD. Rita is an American Society of Clinical Pathology certified Medical Laboratory Scientist (MLS). Rita brings with her 42 years of laboratory experience and 28 years of laboratory teaching. Rita was employed at Avera McKennan Hospital Laboratory in Sioux Falls, SD as a Microbiologist from 2004 to 2021.

In 2020, Rita received the Minnesota State and Colleges and University “Board of Trustee’s Outstanding Educator”.

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Heather Moser, MLS(ASCP), Adjunct Faculty, received her Bachelors of Science in Medical Laboratory Science from South Dakota State University. She currently is working on her Master’s degree in MLS from University of North Dakota. Heather works full-time at Avera Rock Rapids Hospital.      [Heather.moser@mnwest.edu](mailto:Heather.moser@mnwest.edu)

## Mission Statement

The mission of the Medical Laboratory Technician Program at Minnesota West Community and Technical College is to provide students with the appropriate education and training to develop entry-level competencies in all routine areas of the clinical laboratory and to prepare them to practice as ethical and competent professionals.

College Mission Statement: Minnesota West prepares learners for a lifetime of success.

## Approximate Total Program Cost

Tuition	67 credit x \$209.55 = \$14,070 (approx.)
MLT Textbooks & outlines	Approximately 1,052.95
Lab coat, gloves, slides	\$ 50.00 or less
General Education textbooks	Vary by course

For tuition payment visit <http://www.mnwest.edu/index.php/business-office/tuition-payment-information>

For refund policy visit <http://www.mnwest.edu/index.php/policies/512>

## Philosophy and Goals

The philosophy of the Medical Laboratory Technician, Associate in Applied Science Program is to provide quality, relevant, and current instruction in medical laboratory technology through all aspects of performance variables and standards including achievement of accreditation and licensure as well as improved scholarship. The program addresses the needs of the surrounding medical community and prepares graduates to meet the technical, academic, and special needs as defined by the service area.

The goals and purpose of the Medical Laboratory Technician Program are to:

1. Provide quality, relevant instruction in medical laboratory techniques in order to ensure competency at career entry.
2. Provide a curriculum that meets the standards of appropriate accrediting/licensing agencies; maintain flexibility in curricula and facilities to meet the changing needs of the medical community.
3. Use a variety of delivery systems in instruction; increase efforts to provide computer assisted instruction as well as automated clinical stimulation.
4. Provide selective admissions, higher retention standards, and an increase in the graduation ratio.
5. Develop/implement marketing and recruiting procedures; maximize efforts to serve non-traditional part-time students, and include more program opportunities for minorities.
6. Improve the quality of advisement, counseling and tracking of students; work with the placement department to identify employment opportunities.
7. Develop and encourage opportunities for interdisciplinary programs within the college.
8. Increase involvement in community services through regular health-related activities, and improve the delivery of health care services in the region and state.

# Medical Laboratory Technician, A.A.S.

## Career Level Competencies

Upon graduation and initial employment, the Medical Laboratory Technician should be able to demonstrate entry level competencies in the following area of professional practice.

Medical Laboratory Technicians are proficient in:

1. Collecting and processing biological specimens for analysis.
2. Performing analytical tests on body fluids, cells, and products.
3. Recognizing factors that affect procedures and results, and taking appropriate actions within predetermined limits when corrections are indicated.
4. Monitoring quality control within predetermined limits.
5. Performing preventive and corrective maintenance of equipment and instruments or referring to appropriate sources for repairs.
6. Demonstrating professional conduct and interpersonal communications skills with patients, laboratory personnel, and other health care professionals, and with the public.
7. Recognizing the responsibilities of other laboratory and health care personnel and interacting with them with respect for their jobs and patient care.
8. Applying basic scientific principles in learning new techniques and procedures.
9. Relating laboratory findings to common disease processes.
10. Recognizing and acting upon individual needs for continuing education as a function of growth and maintenance of professional competence.

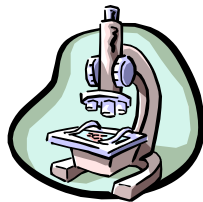
# Medical Laboratory Technician, A.A.S.

## Core Performance Standards

The following core performance standards are provided to assist each student in determining whether he or she can perform in an allied health program. Each of these standards is reflected in course objectives and provides an objective measure for students and advisors to make informed decisions regarding whether the student is qualified to meet the requirements of the program.

If a student believes that he or she cannot meet one or more of the standards without accommodations or modifications, the specific program will determine, on an individual basis, whether or not the necessary accommodations or modifications can be made reasonably.

1. Critical thinking ability sufficient for clinical judgment.
2. Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.
3. Communication abilities sufficient for interactions with others in verbal and written form.
4. Physical abilities sufficient to move from room to room and maneuver in small places.
5. Gross and fine motor abilities sufficient to provide safe and effective care to patients.
6. Auditory abilities sufficient to monitor and assess health needs.
7. Visual ability sufficient for observation and assessment necessary in an allied health program.
8. Tactile ability sufficient for physical assessment.



# Medical Laboratory Technician, A.A.S.

## Essential Functions

The Minnesota West Medical Lab Technician A.A.S. Program faculty has specified the following nonacademic criteria (technical standards) which all applicants are expected to meet in order to participate in the Medical Lab Technician Program and professional practice.

1. **Observation:** The applicant must be able to participate actively in all demonstrations, laboratory exercises, and clinical experiences in the professional program component and to assess and comprehend the condition of all patients assigned for examination, diagnosis, and treatment.
2. **Communications:** The applicant must be able to communicate effectively and sensitively with patients in order to elicit information; describe changes in mood, activity and posture; assess non-verbal communications; and be able to effectively and efficiently transmit information to patients, fellow students, faculty and staff, and all members of the health care team.
3. **Motor:** The applicant must have sufficient motor function to elicit information from patients by appropriate diagnostic or therapeutic maneuvers; be able to perform basic tests; possess all skills necessary to carry out diagnostic or therapeutic procedures; be able to interpret movements reasonably required to provide general care and emergency treatment to patients.
4. **Intellectual/Conceptual Integrative and Quantitative Abilities:** The applicant must be able to measure, calculate, reason, analyze, evaluate and synthesize. Problem solving, the critical skill demanded of allied health practitioners, requires all of these intellectual abilities. In addition, the applicant must be able to comprehend three-dimensional relationships and understand the spatial relationships of structures.
5. **Behavioral and Social Attributes:** The applicant must possess the emotional health required for full utilization of the applicant's intellectual abilities; the exercise of good judgment, the prompt completion of all responsibilities attendant to care of patients; and the development of mature, sensitive and effective relationships with patients. Applicants must also be able to tolerate taxing workloads, function effectively under stress, adapt to changing environment, display flexibility, and learn to function in the face of uncertainties inherent in clinical problems of many patients. Compassion, integrity, concern for others, interest and motivation are personal qualities which each applicant should possess.

Please refer to the Minnesota West Community & Technical College's handbook for further information concerning admission policies and procedures. [www.mnwest.edu](http://www.mnwest.edu)

## Technical Standards

### For Entry – Level Medical Laboratory Technician Program

These technical standards are required abilities for effective performance in the Medical Laboratory Technician (MLT) program. The examples show how a standard may be applied in entry-level MLT education programs. The examples listed are for illustrative purposes only and not intended to be a complete list of all tasks in a MLT program.

Reasonable accommodations to meet standards may be available for otherwise program – qualified individuals with disabilities. Contact the college/university’s Disability Services Office as soon as possible for more information if you think you may need accommodation for a disability.

Capability	Standard	Examples
<b>INTELLECTUAL</b>		
<b>Cognitive Perception</b>	<p>The ability to perceive events realistically, to think clearly and rationally, and to function appropriately in routine and stressful situations.</p> <p>Students must be able to independently and accurately assess or contribute to the assessment of a laboratory test, result, or possible error.</p>	Distinguishes test results as normal, abnormal, critical, or unusual.
<p style="text-align: center;"><b>Critical Thinking</b></p> <p>Careful thought, reasoned judgment. Differentiated from personal opinion and superficial memorization of facts by the ability to obtain and use an appropriate quantity and quality of data for a given situation. Critical thinkers question assumptions, routines, and rituals, reconsider “known facts” when new information becomes available and develop new “rules” when old ones fail or unavailable.</p>	<p>Critical thinking skills demanded of MLTs require the ability to learn and reason, to integrate, analyze and synthesize data concurrently. Students must be able to solve problems rapidly, consider alternatives and make a decision for trouble shooting in the laboratory testing and results.</p>	<p>Able to make effective decisions in the classroom and in the clinical sites.</p> <p>Able to make decisions reflective of classroom learning in the clinical sites.</p>



Capability	Standard	Examples
<b>Motor Skills</b>		
<b>Motor Skills</b>	Ambulatory capability sufficient to maintain a center of gravity when met with an opposing force as in lifting.	Reach, manipulate, and operate equipment, instruments and supplies.  Perform/use computers.  Lift, carry, push, and pull occasionally. Usually less than 10 pounds.
<b>Mobility</b>	Ambulatory capability sufficient to maintain a center of gravity when met with an opposing force as in lifting.	Propel wheelchairs, transport supplies. Work around bedside with other personnel such as in the emergency room. Occasionally will: bend/stoop, squat, climb, reach above shoulder level, knee, balance and twist. Will use keyboard and mouse.

Capability	Standard	Examples
<b>COMMUNICATIONS</b>		
<b>Communication</b>	Communicate in English with others in oral and written form Able to communicate with classmates, instructors, patients, and members of the health care team in order to report laboratory results. Expressing or exchanging ideas by means of the spoken word. Those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.	Utilize oral and written communication skills sufficiently for teaching/learning and for interaction with others.  Read, understand, write, and speak English clearly.  Provide instructions to patient (Example: Glucometer procedure)  Document conversations. Clarify communications received.
<b>Interpersonal Relationships</b>	Interact with classmates, patients, families, staff, peers, instructors, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.  Maintain confidentiality.	Establish rapport with classmates, other students, instructors, laboratory managers and staff. Act professionally at all times. Dress professionally.  Respond in a professional manner.

Capability	Standard	Examples
<b>SENSES</b>		
<b>Hearing</b>	Auditory ability sufficient to hear normal conversation and/or laboratory timers and equipment. Able to receive detailed information through oral communication and to make fine discriminations in sound. (ex. making fine adjustments on machine parts, using a telephone)	Ability to monitor alarms, emergency signals, and telephone Interactions.  Clearly communicates with other students, faculty and staff.
<b>Vision</b>	Visual ability sufficient for observation of laboratory testing and equipment.	Must be able to see small detail and read volumes in some areas, must be able to differentiate colors or distinguish differential stains and fluorescence.
<b>Tactile</b>	Tactile ability sufficient for feeling veins and arteries for phlebotomy procedures.	Performs phlebotomy. Can distinguish between vein and artery and feel small veins of pediatric and infant patients.

Capabilities	Standard	Examples
<b>PSYCHOSOCIAL</b>		
<b>Psychosocial Behaviors</b>	Possess the emotional health required for full use of intellectual abilities, the exercise of good judgment, and the prompt and safe completion of all responsibilities	Demonstrate professional abilities of trustworthiness, empathy, integrity, and confidentiality. Be able to change and display flexibility.  Learn to function in the face of uncertainties and stressful situation.

Capabilities	Standard	Examples
<b>ENVIRONMENTAL</b>		
<b>Environmental Adaptability</b>	Ability to tolerate the environmental stressors.	Work with chemicals and detergents. Tolerate exposure to odors. Work in close proximity to others. Work with infectious agents and blood-borne pathogens. Work with sharps (ex. Needles). Work in environment where temperatures may change.  Be around moving machinery. (instrumentation, moving parts, centrifuge)

## Medical Laboratory Technician, A.A.S.

### Essential Functions And Technical Standards Documentation

All applicants and students **must be able to** fulfill certain essential functions and technical standards. These functions are the essential requirements of the MLT Program that students must master to successfully participate in the program and become employable in the medical laboratory field.

Each applicant needs to assess his/her own ability to meet the essential functions and technical standards stated prior.

I have read and understand the material on pages 6-9 of the MLT Handbook and concur that I can meet these essential functions and technical standards.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Review by Program Director: \_\_\_\_\_

## Medical Laboratory Technician, A.A.S.

### Vaccinations, Physical, and Background Check

#### **Hepatitis B Vaccination:**

The student will need the series of Hepatitis B vaccination which consists of three injections. The second one should be received before the student begins the first blood draw which will probably be in October. If the student is unable or unwilling to receive the vaccination they must converse with the Program Director and a waiver must be completed.

#### **Tuberculosis:**

The student will need either a one or two step skin test, T-SPOT.TB, or Quantiferon which tests for tuberculosis. It is very important the student is tested prior to Clinicals; some clinical affiliates (mainly Sanford Health systems) require the test be done 14 days prior to Clinicals.

#### **MMR:**

The student must have either two MMR vaccinations or a titer (blood test). You will need documentation of vaccinations. Please consult your healthcare provider.

#### **DPT, Tetanus, and Polio:**

DPT and polio vaccinations must be documented on the vaccination form. Documentation of up-to-date Td/Tdap vaccination is also required.

**Varicella (Chicken pox)** The student must complete one of the following: 2 shots, or titer (blood test), or Healthcare provider documentation of varicella (chicken pox) or herpes zoster (Shingles). Either are acceptable to verify immunity.

**COVID Vaccinations:** Refer to Page 39 of this document.

#### **Physical:**

A physical will be required for all students. The Health History Form for Nursing/Allied Health Students is available on the website at <http://www.mnwest.edu/student-forms/>. All information will remain confidential and be kept in a locked file cabinet.

#### **Background check:**

Background checks will be required prior to Clinicals. One background checks are conducted through the State of Minnesota which will include fingerprinting. Student will be required to pay for a Federal Background check through Castlebranch.

## **Teach Out Plan:**

If Minnesota West Community & Technical College or other accreditation body decides to close the MLT Program the college must consider the following options with option one being the most desirable and least disruptive to the students enrolled in the program.

1. The MLT Program could teach out currently enrolled students. It would no longer admit students to the program and would terminate the program and the operations at this site after students have graduated. The institution would submit a formal plan for teach-out plan approval to NAACLS and other organizations requiring the plan within 30 days of announcement.
2. Each student as part of Teach Out Plan would be individually counseled and advised for program completion.
3. Minnesota West Community & Technical could enter into a contractual teach-out agreement with another MNSCU institution to teach out the educational program. A teach-out agreement will again be provided to NAACLS and other interested parties with the developed plan. South Central College in North Mankato is 129 miles away, South Central College in Faribault is 140 miles away, and St. Paul Community College is 243 miles from Luverne. All have NAACLS's approved MLT program. Transfer of records would be easily accomplished as regulated by MNSCU. No formal agreement has been established to date.

### **Disaster Recovery Plan**

MWCTC has created a Business Continuity Plan for the purpose of facilitating the resumption of the critical campus operations, functions, and technology in a timely and organized manner. MLT Program is referred to on page 20. "If program is 80% completed, the term is finished. 2. Less than two weeks, the time could be made up during Winter break or May term to keep the students on track to graduate. If a Program has an hour-based requirement, the student would be moved to the alternate site. If two week or longer, move the program to Worthington campus.

# Medical Laboratory Technician, A.A.S.

## Code of Classroom Conduct

### **I. Class Participation**

- a. All students are expected to constructively participate in all class activities
- b. Constructive participation includes, but not limited to, offering constructive comments, asking questions that enhance class progress, requesting clarification when clarification is needed. In general, constructive participation means those acts or activities which contribute to the educational progress of the class.
- c. Non-constructive behavior includes but is not limited to:
  1. Sleeping, doodling, reading non-class material
  2. Talking to other students during lecture. This is disturbing to the person you are talking to and to the rest of the class!!
  3. Creating disturbances that distract you and your classmates from the class activity.

### **II. Class Arrival and Departure**

- a. Students are expected to arrive in class in a timely manner. Coming in late is very distracting. The instructor has the right to lock the door when class starts and not allowing late students to enter.
- b. Except for serious reasons beyond their control, students should remain in class for the entire class period. For example, Do not get up and throw a piece of paper away during lecture, wait until after class. Try to use the restroom before you come to class.
- c. If you have serious or important reasons (medical, family) for an early exit from class, see me before class.
- d. Medical, legal, or academic appointments (if at all possible) should be made for non-class times.

### **III. Class Conduct During Class**

- a. All students should conduct themselves such that their own learning and the learning of other students is enhanced. Students should exhibit no behavior that would detract from this goal.
- b. No student should attend class under the influence of alcohol or illegal drugs
- c. Bring your textbook, notebook, outline, pens, pencils, highlighter, and paper to classes
- d. Cell phones must be turned off or silenced during class time. If are waiting for an important message please tell me prior to class. It would be advisable to put it on vibrate instead of a ring tone.
- e. No text messaging during class. Leave your phone in your backpack or purse during class.
- f. Weapons, radios, etc should not be brought to class
- g. Unless prior permission is given, children and other visitors are not to be brought to class
- h. No children in the lab. The lab is a biohazard room and also contains many chemicals.

**IV. Assigned Homework and Testing Policy**

- a. See MLT/MA testing policy

**V. Disruptive Behavior**

- a. Students must refrain from all behavior that is disruptive to class progress. This includes, but is not limited to:
  - 1. Making threats against others
  - 2. Physically interfering with others
  - 3. Verbal harassment
  - 4. Sexually uninvited advances to others
  - 5. Stalking, leering, staring, or other threatening behavior
  - 6. Attempts to dominate class activity, unreasonable requests for attention, or preventing others from participation
  - 7. Provoking another to an aggressive or hostile behavior

Also see “*Code of Conduct*” via Minnesota West website: [www.mnwest.edu](http://www.mnwest.edu)

## Medical Laboratory Technician, A.A.S.

### MLT and MA Testing Policies

1. Answer on Scantron is different than answer circled on hard-copy of the exam. The answer on the Scantron will be considered the correct answer.
2. Do not want to use a Scantron to answer questions. That will be up to the discretion of the instructor whether or not the student must use a scantron.
3. Late for exam: If a student is 10 minutes or more late from the time the instructor hands out the test, 10% will automatically be deducted from your grade. The instructor will decide whether to let the student take the test at that class period or later in the day. The student **WILL** take the test that same day
4. Missed exam:
  - a. There will be automatic 10% taken off the exam. If the student does not make up the exam in one week a zero will be issued.
  - b. It is the student's responsibility to contact the instructor to make up an exam and other assignments.
  - c. If it is not possible to make up the exam within 1 week you must notify the instructor. Documentation **must** be given to the instructor. For example:  
Funeral: bring in the obituary from the funeral service  
Illness: Doctor's note
5. Timing of tests: Tests may be timed according to the number of points on the test. The instructor will make the decision if the exam is timed.
6. Cheating: Any student caught cheating will get a zero on that test and the student may be subject to dismissal from the program.
7. Missed labs:
  - a. 1<sup>st</sup> missed lab: 10% will be automatically deducted. Student must make up the missed lab or an incomplete will be issued for the course.
  - b. 2<sup>nd</sup> missed lab and 3<sup>rd</sup> missed labs: Student will receive a zero. The labs must be made up or an incomplete will be issued for the course.
  - c. Greater than 3 missed labs: That won't happen because if you miss more than 3 labs you will fail the class. This will be enforced no matter what!!  
**Absolutely NO EXCEPTIONS!!!!!!!!!!**
8. Lab Reports: Lab reports are to be handed in at the beginning of the lab period on the date they are due. If you miss the lab, the lab report is due the next day. A zero will be given for the lab report if the instructor does not receive the lab the next day. Example: If you miss Monday's lab and there is a lab report due, you need to hand in your exam on Tuesday. Find a way to get it to your instructor the next day. (Have a friend stop and pick it up, scan and e-mail it, fax it, etc.)



9. **If you are present and the lab report is not turned in when the instructor collects them, you will receive a zero. You must turn the lab report in anyway or you will receive an incomplete in the course.**
10. Late research paper, case study or journal article critique: You will be given almost the whole semester to work on these assignments. A zero will be issued for any late paper. We advise the student not to wait until the last minute to write your paper, because one cannot foresee problems that may arise.
11. Missed class: As a student it is **your responsibility** to find out about the events of the class period including any assignments that were given.
12. Exam retakes
- There will be **no retakes of exams**. You will be given fair warning when exams will be held so you have time to study.
13. Final Exam Policy
1. The exam will be taken at the scheduled time.
  2. If you miss the final exam you will get a zero on the exam.
14. No extra credit will be given for any of the MDLT courses.

I, \_\_\_\_\_ have read the above policy and understand the contents.  
*(student's printed name)*

\_\_\_\_\_  
Student's signature

Date: \_\_\_\_\_

## Medical Laboratory Technician, A.A.S.

### Rules for Taking an Exam

1. You have one hour to take regular exams and two hours to complete the final exam. The instructor has the right to extend the hours if necessary.
2. All exams will be proctored by an instructor or staff (not work-study students). If you need special accommodations please discuss this with the instructor prior to the exam.
3. Any cheating will result in a zero for the exam and possible dismissal from the program.
4. Have your calculators out if you need them for the exam. Students may **NOT** share calculators. The instructor will have one if you need it. Calculators on cell phones cannot be used.
5. Cell phones need to be turned off and placed in your back-pack, purse, or on the floor. The instructor has a right to collect all cell phones while the student takes the exam.
6. Use the restroom prior to starting the exam because you will not be allowed to leave the room during the exam.
7. If needed, scratch paper will be provided by the instructor.
8. All books, notebooks and other materials, books, pop, coffee, water bottle, etc. must be put on the floor during the exam.
9. If you are going to a separate room to take the exam, the instructor must check your arms if you are wearing long sleeves and he/she will ask you to empty your pockets. You will leave your back-pack, coat, purse, phone, and etc. with the instructor. You may only take a pencil and calculator with you.

# Medical Laboratory Technician, A.A.S.

## Notes About Grades

### **Can a student take longer than two years to complete the program?**

We advise that students complete the course in two years because the retention of the material presented before the Clinicals will be greater. Some students will take summer classes to lighten the course load during the school year. Some students do opt to take a three-year course. The MLT advisors will help the student set up a schedule for a three-year program. Longer than 3 years is **NOT** recommended.

### **How am I graded?**

Grades are obtained by several means in the MLT Program. In each course of study, a combination of quizzes, unit tests, research papers, midterm examinations, and/or final exams are used to determine how well the student understands the theory being presented. Grading practical laboratory work done by the student assesses the quality of laboratory work. The student receives a final grade in most courses by averaging all the quizzes, tests, and laboratory grades to obtain a summarizing grade. The method for determining the final grade in each course will be explained by the instructor at the beginning of the course and in the course syllabus.

Students must maintain a 2.0 grade point average in order to graduate from Minnesota West Community and Technical College. In addition, the student must pass the MDLT courses and General Education courses with a grade of 75% or greater. If a student receives a grade less than 75% in a MDLT course, they must repeat the course. If a student receives a grade less than 75% on any two occasions, or from any two MDLT courses, the student will be dismissed from the MLT Program and not be allowed back in.

### **Examples:**

1. Student A got a “D” in a Lab Math the Fall Semester.  
He/she then gets a 70% in Immunology the Spring Semester.  
Student A will be dismissed from the MLT Program.
2. Student B received a “D” in Lab Math the Fall Semester.  
He/she passes all courses the Spring Semester.  
He/she repeats Lab Math the next Fall Semester and passes all the other MDLT courses.  
Student B may continue in the MLT Program.
3. Student C receives less than a 75% in two courses in the Fall Semester or any semester.  
Student C is dismissed from the MLT Program.
4. Student D receives a “D” in Lab Math the Fall Semester.  
Student D passes all MDLT courses the Spring Semester.  
Fall Semester Student D repeats Lab Math and gets a “C” but gets a “D” in Hematology II.  
Student D is dismissed from the MLT Program.
5. Student E passes all MLT courses but receives a “D” in Principles of Biology.  
Student E may continue in the MLT Program but must take Principles of Biology over again and obtain a 75%.

### **How many attempts do I have at passing a MDLT course?**

The student can attempt a MDLT course twice.

For example if the student withdraws from MDLT 1100 in Fall of 2011 and then he/she signs up for the course in Fall of 2012 and again withdraws then the student will be excused from the program and will not be able to return.

### **Prerequisites:**

All MDLT classes have the prerequisite of MDLT 1100, Introduction to Laboratory Science. Some courses have prerequisites so if a student does not receive at least 75%, they cannot take the succeeding course. For example, if a student receives a “D” in Clinical Chemistry I, they cannot take Clinical Chemistry II.

### **General Education Courses:**

All General Education courses (Social Sciences, Humanities and Composition) must be passed with a “C” 75%. The student will have to repeat the course if they receive less than a “C”. Only two attempts to pass the course will be allowed.

A student must have an overall GPA of 2.0 or greater to proceed to Clinicals

### **Withdrawal and Refunds**

For information regarding Registration, Tuition, Fees, Withdrawal, and Refund refer to the Minnesota West website: [www.mnwest.edu](http://www.mnwest.edu)



## Student Bloodborne Pathogens Policy

This policy has been developed regarding responsibilities for adherence to the Centers for Disease Control (CDC) and Occupational Safety and Health Administration (OSHA) guidelines for prevention of transmission of blood borne pathogens. This policy recognizes individual rights, confidentiality of test results and health records for students. The policies and procedures outlined here are to protect students, staff, faculty and patients from the spread of disease and to maintain a safe learning and work environment.

Minnesota West Community and Technical College (MWCTC) respect the rights of individuals with communicable diseases. The college will not discriminate against any person on the basis of disability as defined by the Americans with Disabilities Act, including individuals with communicable diseases. Individuals with communicable diseases will not be excluded from participating in the programs, services and activities of the college unless their participation creates a substantial risk to the health and safety of other individuals which cannot be eliminated by reasonable accommodation and the use of standard precautions.

MWCTC respects the privacy rights of individuals with communicable diseases. The college will comply with the Minnesota Data Practices Act and the Family and Education Records Protection Act in maintaining records containing sensitive health information pertaining to students or employees and will not disclose health data in violation of these laws.

### Education:

Before engaging in activities where there is a potential risk for exposure to blood or body fluids all students in the healthcare fields will be educated about bloodborne pathogens and recommendations for safe practice. The Administration/Faculty of Minnesota West Community and Technical College are responsible for disseminating information about bloodborne pathogens and their transmission to their students. The curriculum must reflect content related to bloodborne pathogens and the practice of standard precautions.

### Bloodborne Pathogens Education will be provided as follows:

PROGRAM	COURSE
Practical Nursing	NURS 1180 Clinical Application NURS 1140 Nursing Skills Lab NURS 1120 Nursing Care of the Adult I
Associate Science Nursing	NURS 2180 Clinical Application NURS 2140 Professional Nursing Skills
Medical Laboratory Technician	MDLT 1100 Introduction to Lab Science
Medical Assistant	MDLT 1100 Introduction to Lab Science
Dental Assisting	DEN 1130 Preclinical Dental Assisting
Surgical Technology	SURG 1110 Surgical Microbiology
Radiology Technology	RADT 1100 Introduction to Rad Tech and Patient Care
Massage Therapy	MSTH 1100 Introduction to Massage
Emergency Medical Services	All EMS courses
Phlebotomy	MDLT 1100 Introduction to Lab Science
Certified Nurse Assistant	HC 1175 Nurse Assistant

Students may be participating in activities within courses that have potential for exposure to infectious diseases. All measures must be exercised to minimize risk. Students who fail to adhere to the Blood Borne Pathogens Policy pose a risk to themselves and others and may be withdrawn from the program.

### **Definitions:**

**Bloodborne Pathogens:** Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Human Immunodeficiency Virus (HIV).

**Contaminated:** The presence of blood or other potentially infectious materials on an item or surface.

**Engineering Controls:** Controls that isolate or remove the bloodborne pathogens hazard from the environment. Examples of environmental controls include sharps disposal containers, self-sheathing needles, and needleless systems.

**Exposure:** Skin, eye, mucous membrane, non-intact skin, or other parenteral contact with blood or other potentially infectious materials. Exposure may occur because of a percutaneous injury, or contact with mucous membranes or non-intact skin.

**Other Potentially Infectious Materials:** Blood as well as cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, semen, and vaginal fluids are considered to be contaminated. Standard precautions do not apply to feces, emesis, urine, nasal secretions, sputum, sweat, or tears unless they are visibly contaminated with blood.

**Personal Protective Equipment (PPE):** Specialized clothing or equipment worn for protection against a hazard. General work clothes (uniforms) are not considered PPE.

**Post-Exposure Prophylaxis:** Drug and/or immunization interventions administered to help prevent acquiring a blood-borne infection.

**Standard Precautions:** This is an approach that treats blood and certain body fluids. These are a set of precautions designed to prevent transmission of bloodborne pathogens. They involve the use of appropriate hand washing combined with the use of appropriate protective barriers, such as gloves, gowns, masks, protective goggles or face shields, which can reduce the risk of exposure of the health care worker's skin or mucous membranes to potentially infective materials. Standard precautions also include the concept whereby health care workers take all necessary precautions to prevent injuries caused by sharp instruments or devices.

### **Standard Precautions:**

Minnesota West Community and Technical College requires use of standard precautions in healthcare programs. Education is provided to students by faculty in classes where there is an anticipated potential for exposure. (See information about education above).

## **Engineering Controls:**

These include sharps disposal containers, needleless systems, self-sheathing needles, and other mechanical devices. Annual review of appropriate engineering controls will be performed by instructors teaching in programs utilizing engineering controls.

## **Hand Washing:**

Hand washing is the single most effective method to prevent the transmission of infection. Various hand washing agents, plain or antimicrobial and alcohol based hand sanitizers are available in campus labs and clinical sites. Students, faculty and staff should follow the recommendations published by the CDC for hand washing. <http://www.cdc.gov/handhygiene/>

- A. Hands should be washed with soap and water when hands are visibly dirty, contaminated with blood or body fluids, contaminated with protein-based substances, and at the beginning of the clinical or lab experience.
- B. The preferred method of hand hygiene is with an alcohol based hand sanitizer when hands are not visibly dirty.

Hand hygiene should be performed at the following times:

- ✓ Before direct contact with all patients
- ✓ Before donning gloves
- ✓ After removing gloves
- ✓ After contact with patient intact skin
- ✓ After contact with blood, body fluids, excretions, mucous membranes, non-intact skin, or wound dressings
- ✓ During patient care, if hands are moving from a contaminated body site to a clean body site
- ✓ After personal contact such as nose blowing, sneezing, or using the bathroom
- ✓ Before preparing or eating food
- ✓ After touching the patients surroundings

**Food and drink** may not be stored in refrigerators, freezers, shelves, cabinets, or on countertops where blood or other potentially infectious materials are present. Eating, drinking, applying cosmetics, handling contact lenses is prohibited in work areas where there is reasonable likelihood of occupational exposure.

## **Personal Protective Equipment (PPE):**

Students must use appropriate PPE whenever there is risk of occupational exposure. Gloves must be worn whenever the student expects to have hand contact with blood or other potentially contaminated surfaces. Gloves must be changed between patients and hands must be washed before applying and after removing gloves.

Masks and eye protection devices with various types of shields must be worn during activities that could generate aerosols, splashes or splatters to protect the mucous membranes of the nose, mouth, and eyes. The protection provided by any mask is compromised if it does not fit well, because a poor fit may allow splatter to enter around the edges of the mask. Adjust it so that it fits snugly against the face. Keep beard and mustache groomed so that the mask fits well and can be worn effectively. Change the mask between patients or if the mask gets wet. Remove the mask as soon as treatment is over. Don't leave it dangling around your neck or leave the room with a mask on. When removing a mask, handle it only by the elastic or cloth tie strings. Never touch the mask itself.

Protective eyewear may include goggles, safety glasses with side shields, or regular glasses with solid side shields. Protective body clothing that is fluid resistant must be worn during activities that could generate aerosols, splashes, or splatters.

## **Laundry:**

Student clothing or uniforms that have become contaminated with blood or body fluids must be transported in a tied fluid resistant bag and laundered separately in hot water. Handle contaminated clothing as little as possible. It is the responsibility of the student to take their contaminated laundry home.

## **Housekeeping:**

Student should contact both instructor and facility staff member prior to cleaning contaminated areas. Contaminated work surfaces must be decontaminated with an appropriate disinfectant after completion of procedures. Students must wear gloves when cleaning contaminated surfaces. Students must use mechanical means to pick up broken glassware that may be contaminated. Broken contaminated glassware must never be picked up by hand, even if gloves are worn.

## **Regulated Waste:**

Liquid, semi-liquid blood items that are caked with dried blood (or other potentially infectious materials capable of being released during handling) should be placed in appropriate containers. Containers must be closable, able to fully contain all contents, and prevent leakage of fluids during handling, storage, and transport. They must be labeled with a biohazard label and/or color-coded red. All regulated waste is disposed of according to applicable local, state, and federal laws.



## **Hepatitis B Vaccination:**

Students are required to receive the Hepatitis B vaccination series. The expense of the vaccination is the student's responsibility. If a student is not medically eligible to receive the Hepatitis B vaccination series, they must sign a Hepatitis B waiver form (see appendix). Refusal to receive Hepatitis B vaccination may limit clinical opportunities or placement in a clinical site.

## **Procedure Following an Occupational Exposure to Blood/Body Fluid**

### **Student Exposure/Injury:**

1. Remove all soiled clothing.
2. Wash wounds and skin with soap and water. Flush mucous membranes copiously with water for at least 15 minutes.
3. **Immediately** report the exposure to your supervising instructor after cleansing the area.
4. Follow up consultation will be required. This may involve treatment at an emergency department or public health department for an evaluation.
5. If the clinical institution has an established protocol, follow their protocol.
6. Fill out Student Report of Blood/Body Fluid Exposure and give to your supervising instructor.
7. Expenses as a result of this exposure are the student's responsibility, not the responsibility of MWCTC. (**Note:** Expenses may also include laboratory testing of patient's blood.)

### **Supervising Instructor responsibilities when student is exposed or injured:**

1. Have student prepare a Student Report of Blood/Body Fluid Exposure
2. Give the report to the Administrative Secretary.
3. Inform the student of the importance of getting medical care.
4. Inform the student that they will be responsible for all expenses incurred.
5. Follow-up with the student in one week.

### **Record Keeping:**

A confidential medical record is maintained for each student with occupational exposure. The medical record includes:

- Student name
- Exposure incident report
- Form refusing Hepatitis B vaccination (if applicable)
- Form refusing post exposure evaluation and follow-up (if applicable)

**Additional information may be accessed at the following websites:**

<http://www.cdc.gov/search.do?queryText=bloodborne+pathogens&action=search&searchButton.x=14&searchButton.y=12>

[http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=standards&p\\_id=10051](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10051)

[http://www.osha.gov/OshDoc/data\\_BloodborneFacts/bbfact01.pdf](http://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact01.pdf)

<http://www.osha.gov/Publications/osha3186.pdf>

<http://www.health.state.mn.us/divs/idepc/dtopics/bloodborne/hcp.html>

## **References**

Centers for Disease Control and Prevention (2012). *Workplace safety and health topics*

Retrieved from <http://www.cdc.gov/niosh/topics/bbp/genres.html>

Minnesota Department of Health (2012). *Information about bloodborne pathogens for health professionals.*

Retrieved from <http://www.health.state.mn.us/divs/idepc/dtopics/bloodborne/hcp.html>

Occupational Safety and Health Administration (2012). *Model plans and programs for the OSHA bloodborne pathogens & hazard communications standard.*

Retrieved from <http://www.osha.gov/Publications/osha3186.pdf>

# Minnesota West Community and Technical College

## Student Report of Blood/Body Fluid Exposure

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Date of Birth \_\_\_\_\_

Date of Injury: \_\_\_\_\_ Time: \_\_\_\_\_

Date of Report: \_\_\_\_\_ Time: \_\_\_\_\_

Facility where incident occurred: \_\_\_\_\_

Describe the incident in detail: (Attach extra sheets if needed)

Was the affected area washed/flushed?

Describe where the incident occurred. (pt. room, lab, hallway)

What potentially infectious materials were involved in the incident? (Type, blood, wound drainage, etc.)

What were the circumstances that contributed to the incident?

List the Personal Protective Equipment that was being used at the time of the incident.

Did you receive any follow up care after the incident? Describe the care that you received. (Wash and bandage wound, went to ER, received prophylactic medications, etc.).

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

## Medical Laboratory Technician, A.A.S.

### Attendance, Tardiness and Withdrawals

Students will be dropped from any MDLT course for excessive absences. Absences in excess of 12.5% of the hours of instruction are considered excessive. This equates to 10 hours of instruction.

Students will be dropped from any MDLT course for excessive tardiness. Ten minutes late for class will be considered tardy. Three times of being late will count as one absence. Leaving class early without prior notification will be considered as absent time and will be noted.

Students are advised to communicate with the instructor about absences and tardiness. Call to inform the instructor of unexpected absences or tardiness. If a student knows in advance that they will be late or absent, they should notify the instructor one week in advance. Excused absences may be given if the student notifies the instructor in advance and if the student provides appropriate documentation to explain the absence. Students are responsible for material missed because of absences. It is the student's responsibility to schedule all makeup work.

In the event of bad weather or school closure, the student is advised to listen to local radio or television, check MWCTC website and/or sign up for text messaging alerts.

**Withdrawals:** Students are responsible for officially withdrawing from classes. The withdrawal date is the date the student notifies the registration office of their intent to withdraw. Students will be allowed to withdraw from classes through the 65th class day of fall and spring semesters and through the 14th day of summer sessions. Courses from which students officially withdraw or are administratively withdrawn will appear as a "W" on the student transcript.

# Medical Laboratory Technician, A.A.S.

## HIPAA

The Health Insurance Portability and Accountability Act is referred to as “HIPAA”. The HIPAA privacy regulations protect individually identifiable patient and health plan member information, no matter what form it is in—paper, oral, or electronic. This information is called Protected Health Information or PHI. The HIPAA security regulations cover only electronic forms of this information called Electronic Protected Health Information or E-PHI. The HIPAA security regulations are enforceable as of April 20, 2005.

During some of the laboratory exercises a hospital patient’s specimen or prepared slides, will be brought in for analysis. The instructors take the utmost care in removing any identification of the patient or hospital. In case you receive a specimen that may have some identification left on it you, as a MLT student must be aware of the HIPAA standards that rule privacy and confidentiality. **Note:** Prior to clinical rotations you will be trained by the clinical site in regards to their HIPAA policies and procedures.

### *What is Protected Health Information (PHI)?*

- **Any health information that identifies an individual**
  - Names
  - geographic designations smaller than a State
  - Dates relating to the individual
  - Telephone numbers
  - Fax numbers
  - E-mail address
  - Social Security number
  - Medical record numbers
  - Health plan beneficiary numbers
  - Account numbers
  - Certificate/license numbers
  - Vehicle identifiers, including license plates
  - Device identifiers
  - Universal resource locators (URLs)
  - Internet protocol (IP) address numbers
  - Biometric identifiers – finger & voice prints
  - Full face photographic images & comparable images
  - Any other unique identifying number, characteristic, or code.
- **PHI can be in any form including:**
  - printed
  - electronic
  - oral communication
- **It includes information that:**
  - is collected from an individual
  - is created or received by a covered entity
  - relates to the past, present, or future physical or mental health condition of an individual
  - relates to the provision of health care to an individual
  - relates to the past, present, or future payment for the provision of health care to an individual
  - identifies an individual

*What happens if you violate the Privacy Rule?*

- **Civil penalties**
  - (\$100 per violation per person, up to a limit of \$25,000 for violating each identical requirement or prohibition)
- **Criminal penalties**
  - Knowing release of PHI = up to 1 year jail sentence & \$50,000 fine.
  - Access to PHI under false pretenses = up to 5 year jail sentence & \$100,000 fine.
  - Releasing PHI with intent to sell, transfer or use for commercial advantage= up to 10 year jail sentence & \$250,000 fine.

By signing below, I represent that I have read and understand that I am obligated to maintain the protection of patient privacy and other confidential matters at the Minnesota West Community and Technical College. Any confidential health care information that I may see, hear or otherwise access cannot be disclosed.

I hereby certify that I have read this document and am aware of confidentiality requirements expected of me.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name Printed

***Please turn form into the MLT Program Director. Any student that does not sign this form and have it on file will not be able to participate in MLT classes and labs.***

# Medical Laboratory Technician, A.A.S.

## Institutional Requirements for a Degree

Students will be awarded the Associate in Applied Science Degree upon successful completion of the following:

1. Completion of the requirements established for the technical major approved to offer an A.A.S. degree.
2. A grade point average of 2.0 or better.
3. A letter grade of “C” (75%) or better in all the MDLT prefixed classes and grade of at least a “C” general education courses
4. A minimum of 21 credits from the four general education categories: Communications, Mathematics/Science, Behavioral/Social Sciences, and Humanities offered by Minnesota West or an approved transfer.

\*\*The issuance of the degree is NOT contingent upon the student passing the external certification or licensure examination.

Upon satisfactory completion of the MLT curriculum and upon meeting all other graduation requirements, the graduate will receive the Associate in Applied Science (A.A.S.) degree. The graduate is then eligible to take a national certification examination. Certification may be taken from the following:

*Medical Laboratory Technician, American Society of Clinical Pathology Board of Registry  
–MLT (ASCP)*

## Courses for Medical Laboratory Technician Program

### FALL-FIRST YEAR

COURSE	NAME	CREDIT	Area	LECT/LAB/OJT
HC 1290	Healthcare & Society	1		1/0/0
HC1180	Medical Terminology in Healthcare	2		2/0/0
MDLT 1100	Introduction to Laboratory Science	3		2/1/0
<b>BIOL1115</b>	<b>Human Biology</b>	<b>3</b>	<b>3</b>	<b>2/1/0</b>
<b>CHEM 1150</b>	<b>Survey of Chemistry</b>	<b>4</b>	<b>3</b>	<b>3/1/0</b>
MDLT 1110	Medical Lab Calculations	2	4	2/0/0
Total		<b>15</b>		

### SPRING FIRST YEAR

COURSE	NAME	CREDIT	Area	LECT/LAB/OJT
MDLT 1115	BIOLOGICAL FLUIDS	3		2/1/0
MDLT 1120	IMMUNOLOGY	3		2/1/0
MDLT 1125	CLINICAL CHEMISTRY I	3		2/1/0
MDLT 1105	MEDICAL MICROBIOLOGY I	3		2/1/0
MDLT 1130	HEMATOLOGY I	3		2/1/0
TOTAL		<b>15</b>		

### SUMMER SESSION

COURSE	NAME	CREDIT	Area	LECT/LAB/OJT
	<b>HUMANITY or SOCIAL/BEHAVIOR COURSE</b>	<b>5</b>	<b>(HUMANITY) is area 6 (SOCIAL/BEHAVIOR) area 5</b>	3/0/0
TOTAL		<b>5</b>		

### FALL SECOND YEAR

COURSE	NAME	CREDIT	Area	LECT/LAB/OJT
MDLT 2106	IMMUNOHEMATOLOGY	3		2/1/0
MDLT 2110	CLINICAL CHEMISTRY II	2		2/0/0
MDLT 2120	HEMATOLOGY II	3		2/1/0
MDLT 2101	MEDICAL MICROBIOLOGY II	3		2/1/0
<b>ENGL1101</b>	<b>COMPOSITION 1</b>	<b>3</b>	<b>1</b>	<b>3/1/0</b>
TOTAL		14		



**SPRING/MAYMESTER (Clinical Courses)**

COURSE	NAME	CREDIT	Hours	Area	LECT/LAB/OJT
MDLT 2370	CLINICAL: Simulated Microbiology Lab	2	80 at college	N/A	0/0/2
MDLT 2320	CLINICAL: HEMATOLOGY & HEMOSTASIS	4	180	N/A	0/0/4
MDLT 2330	CLINICAL: MEDICAL MICROBIOLOGY	2	80	N/A	0/0/4
MDLT 2340	CLINICAL: CLINICAL CHEMISTRY AND IMMUNOLOGY	3	135	N/A	0/0/3
MDLT 2350	CLINICAL: IMMUNOHEMATOLOGY	4	180	N/A	0/0/4
TOTAL		15			

**SUMMER SESSION I (Clinical Courses)**

COURSE	NAME	CREDIT	hours	Area	LECT/LAB/OJT
MDLT 2310	CLINICAL: URINALYSIS/BIO FLUIDS	2	90	N/A	0/0/2
MDLT 2360	CAPSTONE	1	45	N/A	0/0/1
TOTAL		3			

TOTAL PROGRAM CREDITS = 67 CREDITS

**Behavioral/Social Science courses include:**

- Economics
- Geography
- History
- Political Science
- Psychology
- Sociology

**Humanities courses include:**

- Art
- Literature
- Humanities
- Music
- Philosophy
- Theater
- Western Civilization

## **COURSE DESCRIPTIONS:**

### **MEDICAL LABORATORY TECHNICIAN (MDLT)**

**MDLT 1100: 3 cr. Introduction to Laboratory Science** Designed to familiarize the student with a career in the medical laboratory field, MLT education programs, medical terminology, certification process, professional organizations, and ethical/legal issues. The student will also obtain blood samples (phlebotomy).

**MDLT 1105: 3 cr. Microbiology I** Introduces the student to the microbial world. The course covers the study of the materials and methods used for identification of pathogenic organisms and the study of these organisms in relation to their disease processes in humans. The course will present microbiology within an epidemiological, diagnostic, and clinical framework.

**MDLT 1110: 2 cr. Medical Lab Calculations** Prepares MLT students for calculations used in the medical laboratory. Class content includes dilutions, titers, Levey-Jenny charts and quality control, metric system, and calculations used in the disciplinary departments in the medical laboratory. Instrumentation will be discussed.

**MDLT 1115: 3 cr. Biological Fluids** Introduces the student to the practical aspects of renal physiology and the theory of urine chemical, physical and microscopic tests. In addition, analysis of other body fluids (fecal specimens, cerebral spinal fluid seminal fluid, amniotic fluid, synovial fluid) is reviewed in the lecture portion of the class.

**MDLT 1120: 3 cr. Immunology** This course introduces the student to a wide array of clinical laboratory techniques that are based on the concepts studied in immunology. The topics range from the very simple to the very complex procedures that are used in all areas of the clinical laboratory. Prerequisite: MDLT 1100.

**MDLT 1125: 3 cr. Clinical Chemistry I** Introduces methods used in the quantitative analysis of chemical constituents of blood and other body fluids. Quality control is emphasized as integral to all aspects of laboratory medicine. Specific testing procedures for various organ systems are discussed and practiced.

**MDLT 1130: 3 cr. Hematology I** Introduces the student to study of cells in the blood. It covers routine procedures performed on patients' blood in a medical laboratory. Emphasis is on the theory and practice of these skills utilizing both manual and automated techniques. Prerequisite: MDLT 1100.

**MDLT 2101: 3 cr. Microbiology II** Continues Medical Microbiology I. Groups of medically important miscellaneous bacteria, yeast, molds, parasites and viruses are studied and correlated to laboratory practice in identification. Prerequisite: MDLT 1105 or discretion of instructor.

**MDLT 2106: 3 cr. Immunochemistry** Teaches the theory of red cell antigen-antibody interaction as it relates to blood grouping and typing, antibody detection and compatibility testing. Blood donor screening and component preparation are also discussed. In the laboratory the student will perform basic blood banking procedures. Accuracy in procedure and interpretation is emphasized. Prerequisites: MDLT 1100 and MDLT 1120.

**MDLT 2110: 3 cr. Clinical Chemistry II** Continues Clinical Chemistry I. Students continue to develop skills in the performance of the chemical analysis of blood. Lectures continue to correlate laboratory results with clinical findings. In addition, material will be presented on markers, minerals and toxicology.

**MDLT 2120: 3 cr. Hematology II** Continues Biological Fluids. Students will carry out wide ranging research into the disease processes that occur in the formed elements of the blood with emphasis on leukemias and myelomas. This course also covers the theory and testing of the coagulation aspects of the blood. The student will prepare a research paper and a journal article report. Prerequisite: MDLT 1105.

**MDLT 2370 SIM (Strategic Instruction Model) Microbiology Lab:** is a review and enhancement of medical microbiology. This is a two-week course held in the student MLT laboratory. This experience enables the students to refine microbiology laboratory techniques and apply knowledge to work in the microbiology department at an entry-level position. In addition, the student will continue their education in Microbiology in MDLT 2330 Clinical: Medical Microbiology.

**CLINICALS: MDLT 2370, 2320, 2330, 2340, 2350, and 2310** In these clinical laboratory courses the student continues their education in an affiliated hospital or clinic laboratory under the direct supervision of a qualified laboratory professional. The experience allows the students to refine laboratory techniques and apply knowledge learned in the didactic phase in an employment-like setting that offers realistic experiences unavailable in student laboratory sessions. Additionally, students acquire non-technical attributes including, but not limited to, communication, critical thinking, multitasking, and independent work skills. The student will practice and gain experience in basic medical laboratory techniques and procedures required for entry level Medical Laboratory Technicians. See catalog for complete descriptions of each course.

<https://www.mnwest.edu/index.php/programs-courses/course-descriptions>

**MDLT 2360: 1 cr. Capstone** This course will focus on further development of critical thinking and problem solving skills in all of the laboratory disciplines, as well as integration of laboratory analyses, interpretation and application. Activities include discussions, case study, interactive activities and assignments, focused reviews, and examinations. Mastery of content will be assessed through a comprehensive examination. Under the direction of faculty, students prepare a written case study and present their findings to laboratory professionals and classmates. Student will also develop resume and cover letter and discuss job interviewing.

For General Education Courses please refer to College website. [www.mnwest.edu](http://www.mnwest.edu)

## Medical Laboratory Technician, A.A.S.

### Policy for Placement of Student At Clinical Affiliates and Alternate Lists

Minnesota West Community and Technical College accepts students for each new Medical Laboratory Technician class from the qualified applicants solely on the basis of their date of application. The date of application is to be that date when the applicant meets all of the entrance requirements without regard to age, religion, race, color, place of national origin, or sex.

The class ranking will also determine the priority of the student for Clinicals. For example, if there are 12 affiliated clinical sites, then the top 12 students will be placed first.

If the number of students admitted exceed the number that can be accommodated in the clinical experience assignments, they will be put on an “**alternate list.**” As places become available, students on the list are given preference for clinical assignments, again by class ranking.

All students will be informed of this policy upon inquiry about the program and at orientation at which time they will sign a form indicating they fully understand these conditions.

All students will be notified the first day of the semester of their ranking regarding Clinicals at a clinical site or they may call the Program Director at any time for current status.

The student must also realize that travel may be involved in the Clinicals at affiliated clinical sites.

**NOTE:** Since the beginning of the program in 1994, this has not been a problem.

## Medical Laboratory Technician, A.A.S.

### Alternate Waiting List

Due to the number of students accepted into our MLT Program and the limited number of clinical sites available for our students, you have been accepted as an alternate. This means that you may take all of the classes on the campus but there may not be a spot for you at the clinical site.

As students drop out of class, the alternates will be moved up the list and eventually into the program and be guaranteed a clinical site.

You are alternate number \_\_\_\_\_.

I, \_\_\_\_\_ (student), have read the above and also the policy that governs the alternate waiting list. I understand my position and the procedure for my being able to get a clinical site to complete the MLT Program. I understand the MLT Program Director will do everything possible to see that I can finish the MLT Program if at all possible.

---

Signature

Date

# Medical Laboratory Technician, A.A.S.

## Clinicals Notes

### *What are the Clinical Rotations like?*

The student is given an opportunity to express his or her choice of affiliates for the clinical experience. It is either the decision of the program director as to which student is assigned to which clinic for the clinical experience, or the clinic may choose by interviewing the student. Students do not always get their exact choice of clinical sites; however, some arrangement acceptable to all can usually be made.

The clinical practice is conducted at an affiliated clinic where the student rotates through the major laboratory departments. It is an opportunity to practice the skills learned in the previous semesters of theory and lab. All course work must be completed before entering Clinicals.

The date of application will determine the priority of the student for Clinicals. For example, if there are 12 affiliated clinical sites then those 12 students with the earliest dates of application will be placed first. However, we will work with students with specific requests. The program director attempts to honor these requests if at all possible. If the number of students admitted exceeds the number that can be accommodated in the clinical experience assignments, they will be put on an alternative list. As places become available, students on the list are given preference for clinical assignments, again by date of application.

All students will be informed of their status on the day of orientation or they may call the Program Director to inquire about their current status.

Clinicals are regarded as a portion of your education; therefore, tuition is paid just like any other course of the program. Some other professions and apprenticeships pay a salary to their interns. However, since the clinical experience is considered to be a portion of the education and is not the same as on the job training, the accreditation requirements stipulate that no salary be paid to students in clinical practice. One person at each affiliate is appointed as the site coordinator who will supervise the Clinicals. It is this person's responsibility to see to it that you have a truly educational experience, and that you are accomplishing the objectives of the experience.

During the clinical practice each student is assigned to rotate through the various departments of the laboratory. The students keep a daily log of the activities that go on throughout the day and also must complete worksheets and take exams on D2L. The student is graded on worksheets, exams and their clinical evaluation.

The Clinicals coordinator will visit the student at least once a semester.. Regular contact is made via phone, fax or E-mail.

## Medical Laboratory Technician, A.A.S.

### Certification Board Exams

#### *Do I have to take a test when I finish the MLT program?*

After having met their academic and laboratory educational requirements, graduates are eligible to take the Medical Laboratory Technician (MLT) national certification boards from credentialing agencies such as American Society of Pathologists (ASCP); called the Board of Registry exam. Certification is the process by which a non-governmental agency or association grants recognition of competence to an individual who has met certain predetermined qualifications, as specified by that agency or association. Minnesota West will highly recommend that students write this exam. The issuing of the associated degree is **NOT** contingent upon students passing a national certification board exam or any other certification or licensing examination as a graduation requirement.

### Service Work

Service work by students in clinical settings outside of regular academic hours must be noncompulsory. Students may not be substituted for regular staff. After demonstrating proficiency, students, with qualified supervision, may be permitted to perform procedures. If the student is hired as an employee outside of Clinical hours the hospital incurs liability of the student for those hours.

See *“MLT Clinical Manual”* for further information and policies and procedures.

## COVID-19 vaccination requirements of clinical facilities

The Medical Laboratory Technician and Phlebotomy programs are required by regulation and accreditation standards to ensure that every MLT/Phleb student receives hands-on learning experiences at clinical facilities. To accomplish this, the MLT/Phleb program has clinical affiliation agreements with several partner facilities to provide experiences where our students may learn. This agreement states: “The College/University will inform its faculty and students of the Facility’s policies and regulations which relate to the clinical experience program at the Facility. These policies and procedures may be changed by Facility at any time in its sole discretion and, upon notice to the College/University, compliance with such changed policies and procedures is required.”

At this time, many facilities are requiring our students to be fully vaccinated against COVID-19. Students who are not vaccinated are permitted to continue in the MLT/Phleb program but will not be able to meet program requirements to successfully complete the MLT/Phleb program. As more clinical affiliate facilities require COVID-19 vaccination, there are limited to no clinical learning opportunities available for students unless they comply with these facility policies and regulations. The college/university cannot guarantee another site should you be unable to meet the policy and regulation requirements of your assigned clinical learning experience facility.

Our program values your commitment to the health of Minnesotans and your choices regarding your pathways forward during this time. We understand that the clinical facility COVID-19 vaccination requirement may mean that you choose not to continue with our MLT/Phleb program at this time. However, we hope that you will continue your educational journey with us as we navigate this pandemic together.

For more information about COVID-19 vaccines, here are some resources to consider:

- [VIDEO: FAQs about the COVID vaccines](#)
- [VIDEO: What to expect getting the COVID vaccine](#)
- [Advantages to getting the vaccine](#)
- [Are the vaccines safe and effective?](#)
- [Fertility and COVID vaccines](#)
- [Emergency Use Authorization vs. “Full Approval”](#)
- [Journal article impact of vaccines; Health, Economic and Social perspectives](#)
- [Myths and facts about COVID-19 Vaccines](#)
- [Update FAQs on COVID-19 vaccinations](#)
- [Vaccine information for specific groups](#)
- [COVID-19 and pregnancy](#)
- [Fetal cell lines vs. fetal tissue use in making COVID-19 vaccines](#)
- [Vatican: Without alternatives, current COVID-19 vaccines are morally acceptable](#)
- [List of ingredients in the vaccines](#)

### **MLT/Phleb Student Handbook Policy:**

Students will abide by clinical facility’s policies and regulations which relate to the clinical experience at the facility. The facility may change policies and regulations at any time without notice. This includes, but is not limited to, immunization requirements, health requirements, background study requirements, and cardiopulmonary resuscitation certification requirements. Students must furnish the College/University with a record of students’ health examinations and current immunizations, related to the clinical experience, and are responsible to keep this certification and testing current annually or on request. Students shall grant permission to submit relevant data regarding their health status to the clinical facility. Failure to do so will result in termination from the MLT/Phleb program.



**Permission form should include the following statement for student signature.**

<b>Release of Health Information</b>	<b>Signature:</b> _____
<ul style="list-style-type: none"><li>• I understand that there are conditions for which accommodations may be appropriate under the Americans with Disabilities Act and that the MLT/Phleb Program will make all reasonable accommodations required by law for otherwise qualified individuals. Refer to college student handbook for how to receive accommodations.</li><li>• I grant Minnesota West Community &amp; Technical College MLT/Phleb program permission to share my health information relevant to clinical facility policies and regulations with those clinical institutions with whom I affiliate in my student role, should the clinical institution request or require it.</li><li>• I understand failure to sign this form or to provide the information requested could mean a clinical site may refuse me placement at their facility.</li><li>• The MLT/Phleb Program does not guarantee an alternative facility placement. I also understand that if no alternative facility placement is available, I may be unable to progress in the MLT/Phleb Program.</li></ul>	

# Medical Laboratory Technician, A.A.S.



## Possible Clinical Practice Sites

**Avera Holy Family Health Services**

826 North 8<sup>th</sup> St.  
Estherville, IA 51334  
(712)362-2631

**Dickinson County Memorial Hospital**

Highway 71 South  
P.O. Box AB  
Spirit Lake, IA 51360

**Avera Flandreau Hospital**

214 N. Prairie  
Flandreau, SD 57028

**Avera Granite Falls Health Center**

345 10<sup>th</sup> Ave.  
Granite Falls, MN 56241

**Avera Hegg Memorial Health Center**

1202 21<sup>st</sup> Ave.  
Rock Valley, IA 51247

**Sanford Sheldon Hospital**

118 North 7<sup>th</sup> Ave.  
Sheldon, IA 51201  
712-324-5041

**Windom Area Hospital (Sanford)**

HWY 71 North  
Windom, MN 56101

**Avera Merrill Pioneer Hospital**

1100 S 10<sup>th</sup> Ave.  
Rock Rapids, IA 51246

**Avera Dells Area Hospital**

909 N Iowa Ave,  
Dell Rapids, SD 57022

**Sanford Luverne Hospital**

305 E. Luverne  
Luverne, MN 56156

**Pipestone County Medical Center (Avera)**

911 5th Ave. SW  
P.O. Box 370  
Pipestone, MN 56164

**Redwood Area Hospital**

100 Fallwood Road  
Redwood Falls, MN 56283  
(507)637-2901

**Sanford Tracy Area Medical Services**

251 5th Street East  
Tracy, MN 56175  
(507)753-6201

**Avera Tyler Healthcare**

240 Willow Street  
Tyler, MN 56178  
(507)247-5521

**Avera Marshall Hospital**

300 E. Bruce St.  
Marshall, MN 56258

**Sanford Worthington Medical Center**

1018 6th Ave.  
Worthington, MN 56187-2343  
507-372-2941

**NOTE:** A student may request a different hospital for Clinicals. Affiliation agreement must be in place prior to Clinicals.

Revised: 01/22

**Minnesota West Community and Technical College  
Medical Laboratory Technician, A.A.S.**

**Signature Page**

**DIRECTIONS:**

- 1. Read MWCTC catalog, MLT student Orientation/Handbook.**
- 2. Sign this form indicating your understanding of and your willingness to comply with these policies.**

My signature below indicates that I have read the MWCTC Catalog and MLT Orientation/Handbook, in full, and indicates that I understand these regulations and I am willing to comply with them.

My signature below indicates that I understand that I am financially responsible for any emergency care which I might receive as a result of illness or injury while assigned to a clinical affiliate of the Minnesota West Community & Technical College MLT program.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_