

Student Orientation to the Clinical Experience

**MEDICAL LABORATORY TECHNICIAN
PROGRAM**



**NORTHEAST WISCONSIN TECHNICAL COLLEGE
CLINICAL EXPERIENCE—10-513-151, -152, -156
STUDENT ORIENTATION TO THE CLINICAL EXPERIENCE**

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NORTHEAST WISCONSIN TECHNICAL COLLEGE MEDICAL LABORATORY TECHNICIAN PROGRAM

Program Mission

The mission of the Medical Laboratory Technician program is to offer an Associate Degree designed for entry level positions as a clinical laboratory technician to prepare students to successfully take National Certification examinations, and to provide continuing education opportunities for all medical laboratory professionals throughout the surrounding communities.

Program Outcomes

- A. Practice laboratory safety and regulatory compliance
- B. Collect and process biological specimens
- C. Monitor and evaluate quality control in the laboratory
- D. Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria
- E. Correlate laboratory results to diagnosis of clinical conditions and/or diseases
- F. Perform information processing in the clinical laboratory
- G. Model professional behaviors, ethics, and appearance

External Standards

- 1. Pre-analytical, analytical, and post-analytical components for all major areas practiced in the contemporary clinical laboratory such as:
 - a. collecting, processing, and analyzing biological specimens and other substances
 - b. principles and methodologies
 - c. performance of assays
 - d. problem-solving and troubleshooting techniques
 - e. significance of clinical procedures and results
 - f. principles and practices of quality assessment
- 2. Application of safety and governmental regulations compliance
- 3. Principles and practices of professional conduct and the significance of continuing professional development
- 4. Communications sufficient to serve the needs of patients, the public, and members of the health care team

STUDENT EXPECTATIONS AND BEHAVIORS

All students are required to adhere to the College [Student Code of Conduct](#) policies as found in the [Northeast Wisconsin Technical College \(NWTC\) Student Handbook](#), available online.

PERSONAL APPEARANCE:

Professional standards of appearance are important to the overall quality of patient care. A high level of personal cleanliness is maintained as a standard for hospital employment. Poor oral hygiene, body odors, unkept hair, and other signs of poor personal hygiene cannot be tolerated.

The following standards were established for all Medical Laboratory Technician students at NWTC.

- a. Adhere to the enforced dress code of the assigned laboratory. Clothes should be clean and neat. Shoes must be low-heeled with closed toes.
- b. Hair must be neat and well groomed. If hair extends over the collar, it must be pulled back in such a way that it does not come in contact with patients or interfere with student clinical tasks. A bun, twist or braid is more professional than a long pony tail.
- c. Keep jewelry to a minimum. Wear only wedding bands, wrist watches and one set of small stud earrings.
- d. Students may not wear heavy make-up, cologne, or perfume.
- e. Keep fingernails clean and well trimmed.

STUDENT BEHAVIOR:

Clinical students are representatives of Northeast Wisconsin Technical College (NWTC) and the Medical Laboratory Technician (MLT) Program. The impressions made at clinical sites will affect perceptions of the NWTC MLT program's quality and will also affect future opportunities and success of students and the program.

These guidelines of appropriate behavior have been established for MLT clinical students from NWTC.

- a. Be prompt. Report to work at assigned time - five minutes early is recommended.
- b. Attendance: Do not abuse emergency days. Use these hours only if necessary. Make required phone calls when unable to attend scheduled clinical day.
- c. Work shift: Attend the entire 8 1/2 hour work span. A 1/2 hour lunch will be given. Also, a 15-minute break is allowed during the shift. Stay until the end of the shift. NEVER ask to leave early if it is not busy. There's always something new to learn. Bring study materials along.
- d. Exhibit a professional manner. Be cooperative, accept constructive criticism well, always be pleasant and considerate of others, and show initiative and enthusiasm in learning.

CLINICAL HOURS

The MLT Clinical runs for 17 weeks, 4 weeks in Simulated Microbiology On-campus clinical and 13 weeks at the assigned lab facility. The student is required to attend 32 hours per week for 13 weeks at the assigned lab facility. The shift consists of day hours to be scheduled by the clinical coordinator and/or the clinical site. The shift hours will be consistent with normal department staffing.

In addition, 2 days of off-shift experience, to include PM and/or night shift rotations, will be scheduled. The objective of this experience is to:

- Orientate the student to the workflow on a PM and night shift rotation.

The site will inform the Program Director of the PM shift and Night shift schedule.

ROTATION SCHEDULE

The student will be scheduled in the following rotations (weeks are simply guideleines):

Orientation	- 1day
Chemistry	- 2 to 3 weeks
Hematology/Coagulation/Urinalysis	- 4 to 5 weeks
Blood Bank	- 2 to 3 weeks
Microbiology/Serology Simulation (NWTC)	- 4 weeks
Choice	- 1 week

Each laboratory has the flexibility to customize length of each rotation. You should receive a copy of the schedule by the first day of the Clinical Experience.

SERVICE WORK

The student must attend a full 32 hours per week as an unpaid student at their clinical site.

The lab may choose to hire the student to work outside of the clinical shift as a phlebotomist or a lab assistant. The student will then be paid and treated as an employee during those hours.

CLINICAL EXPERIENCE PORTFOLIO

A portfolio will be created by each student. Due date for the portfolio is **One Week before the end of your Clinical**. A three-ring binder may be used for documents not able to be uploaded into Blackboard. All entries must be word-processed, as it applies. Organized the portfolio in sections by rotation or week. Elements required in the portfolio include:

- **Weekly Journal Reflection:** A journal is submitted through Blackboard at the end of each week by midnight on Sunday for the week prior. Weekly Progress Reports, log sheets, etc. are uploaded as an attachment.
- **Log Sheets:** Weekly tracking of activities.
- **Evaluations of student by preceptor:** Technical skills and Affective skills
- **Evaluations by student of clinical rotations**
- **Case studies or review questions may be provided.** These activities will be posted in Blackboard. Complete and submit. The activities should be completed during the appropriate rotation.
- **Case Study/Poster assignment:** Select a patient with interesting or unusual lab results. The case study will be developed into a poster presentation. Display the completed poster at your clinical site. A presentation may be completed to the staff also. Submit the abstract and Poster Photo in Blackboard.
- **Four New Technology reports:** (1) Blood Bank, (2) Hematology/Coagulation/Urinalysis, (3) Microbiology, (4) Chemistry – research and report on a new test or instrument/analyzer/procedure either in assigned lab or from a recent (in the last year) clinical laboratory professional journal. Include: methodology, benefits, cost, etc
- **Reflection of off-shift experience.** Compare staffing and workflow to day-shift. Compare types of tests ordered and types of patients tested. Compare atmosphere and interaction between lab staff and other hospital staff. What differences are there from the day-shift? Which shift would you prefer to work in a hospital and explain.

A complete portfolio is a required element of your Clinical Experience. Blackboard submissions simplify the process of returning a physical binder to the student.

The portfolio may be worked on during slow times at the clinical site with the permission of the clinical staff. Case study research and other assignments are never to be done in place of opportunities for clinical experience. If workflow is too heavy to permit time for portfolio work, complete case study assignments after clinical hours.

CLINICAL EXPERIENCE STUDENT LOG

A daily log is to be filled out by the student. **Briefly** list daily activities: procedures performed, slide review, studying, reading, other learning activities. It is valuable to have the log readily available for your preceptors to view along with the evaluation forms. Preceptors are required to sign both forms. Be proactive in tracking tasks/experiences.

Example for Monday: Phlebotomy: 3 adults, 1 infant heel stick
Sysmex - ran 20 counts
Differentials - 8
Reviewed slides
Journal report
Observed bone marrow

**NORTHEAST WISCONSIN TECHNICAL COLLEGE
MLT CLINICAL EXPERIENCE STUDENT LOG**

ROTATION/DEPARTMENT _____

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1					
2					
3					
4					

Describe daily activities: procedures performed, slide review, reading, and other learning activities.

Student signature: _____

Date: _____

Supervisor's signature: _____

Date: _____

LEARNING OBJECTIVES

The learning objectives for each rotation are provided to each clinical affiliate. A copy should be available in each department. The clinical preceptors should refer to these objectives to assure that all requirements are being met. Each objective should be covered according to the evaluation form. Make notations if appropriate action is not available on the evaluation form.

If a crucial objective cannot be completed at a site, the student may be assigned to an alternate site for a limited time to complete the crucial objective.

Students are also given copies for each rotation. Check off each objective as it is completed. It is the **STUDENT's** responsibility to make certain that all objectives have been covered by the end of the department rotation.

PHLEBOTOMY TRAINING

Students must not be used as a phlebotomist. Once competency is achieved in phlebotomy or any other task, repetition should be limited to periodic review. More practice is beneficial to professional development than just meeting the required level.

It would be reasonable to be assigned to morning pickups or pickups during the shift not to exceed 30 minutes per day on average throughout the clinical.

It is important to experience all types of phlebotomy situations, to include:

1. Venipunctures to include vacutainer, butterfly, and syringe methods — (100 minimum)
2. Infant heel sticks – as available for performance or observation
3. Assisting in blood collection from a line or shunt
4. Capillary punctures from adults and children
5. Venipuncture on a child
6. Venipuncture on difficult patients - difficult veins, patients with IVs, critically ill patients, etc.
7. Blood culture collection
8. Observation of arterial blood collection
9. Emergency Room, Intensive Care Unit patients

The student must be proactive to make sure that the clinical staff provides the above experiences by the end of the Clinical. If only being assigned routine easy adult patients, remind the staff that experience is needed in a variety of phlebotomy situations.

Keep count of first 100 venipunctures. (This doesn't mean that all phlebotomy is done!) Continue to count finger sticks and heel sticks.

If student is being used as a phlebotomist at the expense of other clinical experiences, please inform the Program Director.

RESPONSIBILITY FOR TESTING

Students will have the status of learner and will not replace clinical staff nor give service apart from its educational value.

After demonstrating proficiency, students may perform tests on actual clinical specimens. However, the student's work must be supervised by the clinical staff. All responsibility for test results and reporting must be assumed by the clinical staff.

If student is not being supervised properly (i.e. performing patient testing completely unsupervised, or never allowed to perform actual patient tests or over-supervised), please discuss the situation with the Program Director.

WEEKLY STUDENT PROGRESS AND ATTENDANCE REPORTS

A Weekly Student Progress Report must be completed at the end of each week. Students are responsible for giving the form to their main clinical instructor for the week or the education coordinator. The report must be completed, signed by clinical instructor or coordinator and the student, then submitted through Blackboard. NOTE: Blackboard is the preferred method for submission, however, if using Blackboard is difficult at a site, faxing is an *alternative route for submission*. Include student name and Karla Sampselles name in the fax documentation. (FAX 920-491-2660).

Attendance for the week is also logged on this report form. The student should log date, and times in and out each day. The preceptor/supervisor then verifies the attendance when completing the progress report.

The preceptor/supervisor should discuss the report with the student, answering any concerns and making suggestions for improvement. The student needs to be receptive to feedback to improve learning, efficiency, and performance. Remember that the Clinical Experience is a job interview.

The student is responsible for submitting the report weekly along with the journal assignment.

Attendance Policies:

The student is allowed 3 emergency days. This amounts to a maximum of 24 hours. Minutes of tardiness and leaving early without being excused by staff are counted.

Absences due to COVID should be documented and will be addressed on a student by student basis.

Any absence time totaling over 24 hours may need to be made up at the discretion of the clinical preceptor. The make-up schedule should be agreed upon between clinical instructors and the student. The clinical staff will call the Program Director to inform of make-up schedule.

The student is required to call the designated clinical personnel and e-mail Karla Sampselles (karla.sampselles@nwtc.edu) before the beginning of the shift to report an absence.

HEALTH AND MEDICAL CARE

INCIDENT REPORTS

You must report any work-related accidents or injuries immediately to the Lab Manager. The hospital policy concerning employee accident/injury will be followed.

When a student has sustained a significant exposure to bloodborne pathogen or OPIM at the clinical site, that student shall follow that institution's established bloodborne pathogen exposure control plan to include:

1. Immediate first aid
2. Source patient testing
3. Base line testing of student
4. Initial prophylaxis treatment of immunoglobulin. If Hepatitis B series is indicated, this will be provided by Student Health Services.

The clinical site must report any work-related accidents or injuries immediately to the Program Director or Security Office at NWTC. They will then follow the NWTC Protocol for Exposure policy to complete any additional processes and forms. A copy of the current NWTC Protocol for Exposure policy will be provided during orientation.

STUDENT ACCIDENT INSURANCE

The Accident Only Insurance Plan provides medical benefits up to \$50,000 with no deductible when an accident occurs while on campus, attending a practicum program or other recognized student group approved by the College, or during travel to and from a program. The plan offers comprehensive benefits that include hospital room and board, inpatient and outpatient surgical procedures, labs and x-rays, physician office visits, ambulance, durable medical equipment, emergency care and prescription drugs, in excess to any other valid / collectible health insurance coverage. The NWTC web site provides details about this insurances under the Current Students tab.

Each student is responsible for their own medical bills due to illness on the job. Students are encouraged to maintain a personal health insurance plan. If students do not have a health insurance plan, please consider the plan offered to students by NWTC.

LIABILITY

NWTC maintains medical malpractice insurance to cover students during clinical experiences.

STUDENT EVALUATION OF CLINICAL EXPERIENCE

Students have the opportunity to evaluate each clinical rotation.

These evaluations will be kept confidential. The individual clinical site staff will never have access to student evaluations of them. Each site does want to improve the student experience, however, meaningful generic comments will be shared with all sites.

Please be very open and honest. These evaluations help the NWTC MLT Program determine the quality of clinical sites. In addition, clinical sites can improve the student experience with feedback from students.

**NORTHEAST WISCONSIN TECHNICAL COLLEGE
MEDICAL LABORATORY TECHNICIAN
STUDENT EVALUATION OF CLINICAL EXPERIENCE**

Affiliate: _____

Department: _____

Student: _____

Date: _____

This evaluation will be confidential. Mark an X in one box on each line. Write N/A if the item is not applicable. Complete front and back.

		Never	Rarely	Sometimes	Often	Always
I. THE CLINICAL STAFF						
Showed interest in spending time with student.						
Encourage student questions and comments.						
Answered questions.						
Was available to discuss issues related to the rotation.						
Maintained high standards of quality control.						
Explained procedures and theories effectively.						
Provided useful feedback on performance.						
Was competent in area of practice.						
Showed respect for students.						
The personnel in this department hold a positive attitude toward students and teaching.						
II. INSTRUCTION METHODS						
Assignment of tasks was appropriate.						
Department policies and procedures were stated at the beginning of rotation and clarified throughout the rotation.						
Additional study aids were provided to support the rotation (e.g., unknowns, slides, Kodachromes, case studies, textbook references.)						
Followed objectives sent by NWTC.						
Feedback from professional evaluation was timely.						
This rotation increased my interest in further study of this area.						
Allowed student to perform tests freely without excessive concern for supplies or equipment use.						

III. Comment on the strengths of this rotation.

IV. Comment on the weaknesses of this rotation.

V. Comment on the strengths of the academic preparation for this rotation.

VI. Comment on the weaknesses of the academic preparation for this rotation.

VII. Additional comments.

COLLEGE-CLINICAL SITE COMMUNICATION

The Program Director will contact each student and Lab Manager or Education Coordinator every third week by phone/e-mail. Student progress will be discussed as well as any problems that may arise.

In addition, at the **conclusion of the first three weeks** of student clinical, the clinical instructor will complete an evaluation using the **TSA Evaluation form** (see the last page) as a starting point. The purpose of the evaluation is to bring any opportunities for improvement to the attention of the student and the Program Director, allowing the development of a plan for success. The communication may occur via e-mail, phone call or in-person meetings as schedules and urgency allow.

The Program Director will make at least one (two for new affiliates) personal visit during the Clinical to meet with the student and clinical instructors to discuss student progress. During this visit a private meeting with the student will also take place to discuss any problems or concerns that the student or clinical instructors may have raised.

Students are encouraged to call/e-mail the Program Director at any time to discuss any problems or concerns that you have concerning the Clinical.

Students are required to complete a journal entry at the end of each clinical week to summarize the week's activities including personal reflection and TSA accomplishments. See the Blackboard course for the link to submit weekly journal assignments. The journal is another means for discussion of challenges and issues. Watch for comments.

EVALUATION FORMS

The evaluation for each rotation consists of two (2) parts – the Rotation **Technical Performance Evaluation** and the **Affective Evaluation**.

The Technical Skills Evaluation lists specific tasks or competencies. Each is evaluated according to the evaluation form. A designation that does not meet the minimum requirements in any competency mandates that the student must repeat or extend the rotation.

Evaluations are based on:

1. Successful performance as stated per competency
2. Discussion
3. Observation
4. Not done, if provided as an option

An **Affective Evaluation** must also be completed for each rotation. Areas evaluated on this form are general, which can be applied to each rotation. They include Quality Control and Safety, as well as criteria for Affective evaluation. Students who are graded with a less than 2 average out of possible 4 in any area must be counseled and given extended time or opportunity to improve to a minimum score of 2.

The designated Clinical Preceptor should promptly fill out the evaluation at the end of the rotation. The evaluating Clinical Preceptor should then meet with the student to go over the evaluation, and provide comments and suggestions to the student. The student should be given the opportunity to respond to the evaluation and comments. Both Clinical Preceptor and student must then sign and date the Evaluation.

Completed and signed forms are uploaded into Blackboard at the end of the rotation. The student should keep the original forms in an organized manner.

Pre- and Post-Tests

There are 6 pretests and post-tests. The tests are located in the Clinical Experience 1 course in Blackboard. The Clinical Preceptor will receive passwords to access each test. The passwords will be kept secure. Once a test is opened, the student must take the test at one sitting using no notes or other reference materials. These exams test knowledge of theory. Test questions are taken from course material taught at the College. The purpose of these exams is to prepare the student for certification exams. College instructors choose test questions considered to be basic knowledge necessary for the student to know in order to pass certification exams and succeed in an entry level position.

The Pre-tests will be completed at NWTC prior to the rotation. The student may take notes after the pre-test is completed and submitted, but is not allowed to print a copy of the test. This test is for the student and instructor information, in order to establish a base-line from which to build on during rotations in preparation for Post-tests and the ASCP BOC.

The Post-test should be taken the last day of a rotation. This test score will be factored into the student final grade. The student may not print a copy of this test.

The student must achieve a 70% on the post-test. One retake will be given if grade earned is below 70%. If a higher grade is achieved on the retake, the recorded grade will be the minimum score required of 70% for final grade calculation.

Tests:

Chemistry Rotation:	Chemistry (includes chemistry math)
Hematology/Coag/UA Rotation:	Hematology/Coag (includes body fluids) Urinalysis
Microbiology Rotation:	Microbiology Serology
Blood Bank Rotation:	Blood Bank



Northeast Wisconsin Technical College

105131 Medical Laboratory Technician

Performance Assessment Tasks

10-513-1 Medical Laboratory Technician WTCS TSA Scoring Guide

Directions

This summative assessment scoring guide will be used to determine if you have met the program outcomes at **3 weeks** and at the **end of your program**. To meet the requirements on the scoring guide, you will be asked to draw upon the skills and concepts that have been developed throughout the program and are necessary for successful employment in your field.

Your instructor/preceptor will provide detailed instructions on how this rubric will be used. After your instructor/preceptor completes this scoring guide, you will receive feedback on your performance including your areas of accomplishment and areas that need improvement.

Target Program Outcomes

1. TSA1 - Practice laboratory safety and regulatory compliance
2. TSA2 - Collect and process biological specimens
3. TSA3 - Monitor and evaluate quality control in the laboratory
4. TSA4 - Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria
5. TSA5 - Correlate laboratory results to diagnosis of clinical conditions and/or diseases
6. TSA6 - Perform information processing in the clinical laboratory
7. TSA7 - Model professional behaviors, ethics, and appearance

Rating Scale

Value	Description
Met	Performs adequately, meets basic standards
Not Met	Little or no evidence of meeting basic standards
NO	Not observed at this point in time

Scoring Standard

NOTE: At 3 weeks into the clinical experience, there will be many NO (Not Observed) marked.

You must achieve a rating of MET on all criteria for each program outcome to demonstrate competence (passing). A rating of NOT MET on any criterion results in a NOT MET score for that program outcome and for the TSA Assessment.

Scoring Guide

	Criteria	Ratings
1.	TSA1 - Practice laboratory safety and regulatory compliance	
2.	Practice standard precautions	Met Not Met NO
3.	Locate emergency equipment	Met Not Met NO
4.	Demonstrate appropriate handling and disposal of biohazardous waste	Met Not Met NO
5.	Follow HIPAA regulations	Met Not Met NO
6.	TSA2 - Collect and process biological specimens	
7.	Identify patient and specimens accurately	Met Not Met NO
8.	Process lab specimens per CLSI standards	Met Not Met NO
9.	Perform blood and other specimen collection procedures per CLSI standards	Met Not Met NO
10.	TSA3 - Monitor and evaluate quality control in the laboratory	
11.	Take appropriate action	Met Not Met NO
12.	Assess acceptability of QC results	Met Not Met NO
13.	Use appropriate quality control protocol	Met Not Met NO
14.	TSA4 - Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria	
15.	Perform procedures following laboratory guidelines	Met Not Met NO
16.	Recognize normal, abnormal and critical values	Met Not Met NO
17.	Operate laboratory instruments efficiently	Met Not Met NO
18.	Perform routine maintenance on laboratory instruments	Met Not Met NO
19.	Assist with troubleshooting	Met Not Met NO
20.	Determine reportability of results	Met Not Met NO
21.	TSA5 - Correlate laboratory results to diagnosis of clinical conditions and/or diseases	
22.	Recognize and correlate lab test results to hematology/coagulation findings	Met Not Met NO
23.	Recognize and correlate lab test results to chemistry findings	Met Not Met NO
24.	Recognize and correlate lab test results to blood bank findings	Met Not Met NO
25.	Recognize and correlate lab test results to microbiology findings	Met Not Met NO
26.	Recognize and correlate lab test results to immunology findings	Met Not Met NO
27.	Recognize and correlate lab test results to urinalysis findings	Met Not Met NO
28.	Correlate test results from multiple lab areas to diagnose patient clinical condition/disease	Met Not Met NO
29.	TSA6 - Perform information processing in the clinical laboratory	
30.	Perform accurate data entry	Met Not Met NO
31.	Review automated data for accuracy and consistency	Met Not Met NO
32.	Utilize Laboratory Information System (LIS)	Met Not Met NO
33.	TSA7 - Model professional behaviors, ethics, and appearance	
34.	Arrive on time	Met Not Met NO
35.	Adhere to the clinical dress code	Met Not Met NO
36.	Demonstrate positive attitude	Met Not Met NO
37.	Communicate with colleagues and patients in a professional manner	Met Not Met NO
38.	Display respectful behavior	Met Not Met NO
39.	Apply ethical behaviors	Met Not Met NO